"A STUDY TO ASSESS THE EFFECTIVENESS OF AUDIO VISUAL DISPLAY REGARDING ILL EFFECTS OF TOBACCO PRODUCTS ON THE AWARENESS AND ATTITUDES OF ADOLESCENT BOYS TOWARDS USING TOBACCO PRODUCTS IN SELECTED SCHOOLS AT COIMBATORE".

M.Sc (NURSING) DEGREE EXAMINATION

BRANCH IV-COMMUNITY HEALTH NURSING

R.V.S. COLLEGE OF NURSING

SULUR, COIMBATORE

THE TAMILNADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI-32

MASTER OF SCIENCE IN NURSING

APRIL 2012

"**A STUDY TO ASSESS THE EFFECTIVENESS OF AUDIO VISUAL DISPLAY REGARDING ILL EFFECTS OF TOBACCO PRODUCTS ON THE AWARENESS AND ATTITUDES OF ADOLESCENT BOYS TOWARDS USING TOBACCO PRODUCTS IN SELECTED SCHOOLS AT COIMBATORE".**

Examination : M.Sc (Nursing) Degree Examination

Examination Month & Year : _____

Branch & Course : Branch IV-Community Health Nursing

Register No : 30104631

Institution : RVS College of Nursing, Sulur, Coimbatore

Sd _____ Sd _____

Internal Examiner External Examiner

Date: _____ Date: _____

The Tamilnadu Dr.M.G.R. Medical University

Chennai-32.

"A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore".

Approved by the Dissertation Committee on _____

1. Professor in Nursing Research ----------

Dr. (Mrs) Annamma Prabhakar, M.Sc (N), PhD
Visiting Professor,
R.V.S College of Nursing,
R.V.S Institute of Health Sciences,
Sulur, Coimbatore.

2. Professor in Clinical Speciality ----------

Mrs.Saramma Samuel, M.Sc (N)
Principal,
R.V.S.College of Nursing,
R.V.S Institute of Health Sciences,
Sulur, Coimbatore.

3. Medical Expert ----------

Dr. U.M.Natarajan M.B.B.S.M.D., C.Diab
Professor (Retd) CMCH, Coimbatore,
Consultant General Physician / Diabetologist/ Cardiologist
R.V.S. Hospital, Coimbatore.

A Dissertation submitted to The Tamil Nadu Dr. M.G.R Medical University, Chennai-32.
In partial fulfillment of the requirement for the Degree of
Master of Science in Nursing
April – 2012

CERTIFICATE

This is to certify that this dissertation titled **'A STUDY TO ASSESS THE EFFECTIVENESS OF AUDIO VISUAL DISPLAY REGARDING ILL EFFECTS OF TOBACCO PRODUCTS ON THE AWARENESS AND ATTITUDES OF ADOLESCENT BOYS TOWARDS USING TOBACCO PRODUCTS IN SELECTED SCHOOLS AT COIMBATORE'** is the bonafide work done by **Ms.A.Arockia viji,** R.V.S College of Nursing, R.V.S Educational Trust, Sulur, Coimbatore. Submitted to The Tamil Nadu Dr.M.G.R Medical University, Chennai-32, in partial fulfillment of the requirement for the award of the degree of M.Sc (Nursing) Branch IV –Community health Nursing under our guidance and supervision during the academic period from 2010-2012.

Prof. Mrs. Saramma Samuel M.Sc (N),

Principal,
R.V.S College of Nursing,
R.V.S Educational Trust,
Sulur, Coimbatore,
Pin Code – 641 402.

ABSTRACT

A study to assess the effect of audio visual material on ill effects of tobacco products on the awareness and attitude of adolescent boys towards using tobacco products in selected schools at Coimbatore.

The main aim of the study is to determine whether the audio visual display makes any difference in the level of awareness and attitude of adolescent boys (smokers & non smokers) with regard to tobacco products and its use.

The study was conducted in a Government Boys Higher Secondary School which is situated in Sulur, Coimbatore. The conceptual framework for the study was developed on the basis of Rosentochs and Becker "Health Belief Model". One group pre and post design was used to determine the effectiveness of audio visual material on adolescent boys. The sample consisted of 150 students selected by simple random sampling from the 10^{th}, 11^{th} and 12^{th} standards.

The data from the adolescent boys were collected using knowledge questionnaire and attitude scale one day before the audio visual material display as pre test. Then audio visual material was displayed for 4 days.First day the researcher allowed the students to visit the audio visual material in class time. The researcher explained each audio visual material and encouraged the students to ask questions and clarified to them. Next day onwards students attended the exhibition during their free hours. The researcher confirmed that all selected samples visited the exhibition by maintained an attendance list. On the 5^{th} day video teaching program was conducted on ill effects of using tobacco products. On the 6^{th} day live experience of the people was shared to the students. Then on the 20^{th} day, the questionnaires were administered to the 150 samples as post test.

The study result showed that before intervention smoker and non smoker had poor knowledge (mean knowledge score percentage in non smokers 35.5 and smokers 28.0). Statistically there was significant difference between the knowledge mean score of non smokers and smokers before intervention ($t = 3.90$ at $df - 148$, $p = 0.05$). After intervention both the groups had good and average knowledge (mean score percentage in non smokers 70.3 and smokers 69.5) .After intervention the difference observed in the mean score of non smokers and smokers was statistically significant. ($t = 3.86$ at $df = 148$, $p = 0.05$). Similarly before intervention both the groups had poor attitude (mean attitude

score percentage in non smokers 30.3 and smokers 27.0). Statistically there was significant difference between the attitude mean score of non smokers and smokers before intervention ($t = 2.81$ at df – 148, $p = 0.05$).). After intervention both the groups had good and average level of attitude (mean attitude score percentage in non smokers 70.0 and smokers 67.5). The difference observed in the mean attitude score of non smokers and smokers was statistically non significant ($t = 1.67$ at df =148, $p= 0.05$).

The study concludes that audio visual material display is a cost effective nursing intervention to enable the individuals to acquire knowledge on ill effects of using tobacco products and also to develop a favorable attitude towards quit to smoke and say ‘no’ to tobacco products.

ACKNOWLEDGEMENT

I thank the ***Lord Almighty*** with my whole heart and soul for His abundant grace which strengthened me in each and every step throughout this endeavor.

First I would like to appreciate and thank the ***respondents*** for their participation and co-operation to conduct this study successfully.

It is my long felt desire to express my profound gratitude and exclusive thanks to ***Prof.Dr.Annamma Prabhakar, M.Sc (N), Ph.D,*** the visiting professor, R.V.S College of Nursing, Sulur. It is a matter of fact that without her esteemed suggestions, highly scholarly touch and piercing insight from inception till completion of the study, this work could not have taken shape.

I express my sincere and heartfelt thanks to ***Prof.Mrs. Saramma Samuel M.Sc (N),*** my guide and Principal, R.V.S College of Nursing, Sulur for her intuitive excellent guidance and motivation in all matters large and small since the inception of this thesis.

I wish to express my sincere thanks to ***Mrs.Emerensia, M.Sc (N),*** Vice Principal, R.V.S. College of Nursing, Sulur for extending her support to conduct my study.

My sincere gratitude to ***Dr U.M.Natarajan M.B.B.S., M.D., C.Diab, RVS*** Hospital for validating the tool and for his constant guidance.

I extend my thanks to the ***Headmaster***, Govt Boys Higher Secondary School for granting permission and making necessary arrangements to conduct the study in the school.

I express my deepest gratitude to ***Mr.Somasundaram M.A.,M.Phil.,Ph.D,*** Head Of The Department Of English, RVS College Of Arts And Science for his careful editing of the report.

I express my sincere thanks to ***Mrs.Suja Santhosh, M.Sc (Statistics), B.Ed,*** Sulur for their expert guidance in statistical analysis.

I am deeply grateful to ***Mr.Kannan, Mr.Senthura Pandian, Mr. Mohan*** and ***Mrs. Stella Librarians,*** R.V.S. College of Nursing, Sulur and ***Mrs.Revathi,*** R.V.S InfoTech for their help in availing reference materials.

I am thankful to ***SRS computer centre*** for their excellent help to bring this manuscript effectively.

I wish to extend my thanks to my classmates and roommates for their supportive and positive interaction.

Finally I wish to acknowledge my beloved mother and friends for their prayers, love, affection, valuable suggestions, constant encouragement and support throughout my research study.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER –I

INTRODUCTION

BACKGROUND OF THE STUDY

"Using tobacco products or health, the choice is yours"

- Andrew Greeley

Adolescence is a transitional stage of physical and mental human development generally occurring between puberty and legal adulthood (age of majority), but largely characterized as beginning and ending with the teenage stage. A young adult is generally a person between the ages of 20 and 40, whereas an adolescent is a person between the ages of 13 and 19 years.

During the adolescent period some changes occur physiologically, emotionally, intellectually, socially and psychologically. The physiological changes involve the sexual maturation of a child, as well as other body changes. Adolescence is the period in the life span of a person when he or she assumes the ability for reproduction. The sign of puberty in girls is menstruation. There is no such definite change in the boys to mark puberty. However, a variety of bodily changes do appear including growth of long bones of arms and legs, appearances of pubic hair and appearance of facial hair. The boys also experience nocturnal emissions or ejaculation of semen during sleep.

In psychosocial changes the adolescence brings a change in the habitual pattern of behaviour, attitude and personality. There are marked changes in the adolescent's social interest. Adolescents use new set of values in selection of friends and social grouping. The choice of friends depends more on similar interests and values. The peer group influences the attitudes, values and behavior more than the child's own family.

The characteristics of an individual will vary according to their age. In adolescent period the boys have both characteristics such as positive and negative. The positive

characteristics are that they learn easily and rapidly, are highly imaginative, have high degree of curiosity, powers of observation, think clearly, recognize relationships and comprehend meanings. Negative characteristics are drug abuse, suicidal attempt, pessimistic character, and violent behavior.

Adolescence is an extremely enthusiastic, energetic, joyous and fun loving period. But the beauty of this phase is marked by emotions, myths, insecurities, apprehensions and disbeliefs which are the direct result of lack of information and knowledge. Adolescence is also marked by great emotional changes in boys and girls. Maturity of thought and experience are lacking, selfless love is the most predominant feature of an adolescent (**Dr.Neelam Thakur – 2007**)

Adolescents are not mature to take right and wise decisions, and in this process many commit blunders. The power to think intellectually, perform skillfully, handle things meticulously, and manage daily affairs tactfully is completely lacking in an adolescent, making them a prey to unscrupulous elements of society, apart from inflicting pain, turbulence and stress in life. It is the age of "cosmic yearnings and private passions of social concern and personal agency" where inconsistency, ambivalence, ignorance and blind faiths guide them all through. (**G.Christine – 2003).**

Unemployment, poverty, urbanization, industrialization and growing competition have dramatically pushed millions of adolescents into adult roles and responsibilities. His/her overall personality gets a complete face lift and he / she is undergoing the required change from organization (adolescence) to reorganization (adulthood). This is the time when he / she learns how to adjust in society, respect societal norms and understand deep relations. Adolescents are capable enough to handle their problems and develop the ability to cope up with situations. But each person differs in dealing with these aspects. Some like to share it with friends. Some others like to use addictive substances like tobacco and smoking to escape from various situations. Initially they start these habits for a sense of pleasure. On the long run these habits may lead to family and social problems. **(Porter Novelli – 2006)**

Using chemical substance in tobacco products to feel better, look better, act more sociable, stay awake, and go to sleep or lose weight, is rampant all over Some of the most famous music, movie and sports star openly model substance use and abuse. It is no surprise that adolescents accept them as role models very early in life. Tobacco is incidentally, amongst the most addictive substances, more than so many other drugs. Tobacco can even be considered as a stepping stone to other addictive substances.

Phipps (2006) says that the nicotine in the tobacco smoke activates the body's fight or flight pathways releasing adrenaline and select serotonin pathways impacting the mood and impulsivity. After long term smoking habit, they become so addicted to it that without the usual amount of nicotine, one starts feeling restless and incomplete.

Adolescent cigarette smoking is one of the major public health problems. Many adult smokers had initiated the habit as adolescents. Also using tobacco products like cigarette, beedi, cigar among adolescents has short to medium term health effects in the users as well as peers who may be exposed to environmental smoke. **(Marisa Weiss - 2009)**

While peer pressure and parental smoking are important reason for using tobacco products by children in India, the vigours of smoking behavior are different in urban and rural areas. In urban areas the young often smoke because their peers smoke. However peer pressure is not only the reason among all the economic classes. Traditional values do not provide a chance for smoking among the young and females. The real problem in urban areas is located among urban poor. Boys under the age of 10 years and even sometimes 5 to 6 years start using tobacco products. Their most common reason is not peer pressure but their film hero who smokes. **(Aghi, M. B – 2007)**

Smoking and tobacco related health complications are the single most important cause of preventable, premature deaths. Studies say that cigarette is responsible for over 4, 00,000 deaths each year. Smoking causes significant increase in the risk of cancer, chronic bronchitis, emphysema, impotence as well as disease of the heart and coronary arteries. Chewing tobacco and using snuff also dramatically increase the risk for cancers of the mouth and throat.

Smokeless tobacco is a known cause of human cancer. In addition, the nicotine in smokeless tobacco may increase the risk for sudden death from a condition where the heart does not beat properly (ventricular arrhythmias) and, as a result, the heart pumps little or no blood to the body's organs.

Globally everyday about 80,000-1, 00,000 youth start smoking. It was estimated in 1999-2001 that 8500 adolescents start using tobacco, the most susceptible time for initiation of tobacco use in India is adolescence and early adulthood (12-24 yrs) .Of 1000 teenagers who smoke today, 500 will eventually die of tobacco related diseases, 250 in their middle age and 250 in their old age.

Smoking is on the rise in the developing world but falling in developed nations. Among Americans, smoking rates shrunk by nearly half in three decades (from the mid-1960s to mid-1990s), falling to 23% of adults by 1997. In the developing world, tobacco consumption is rising by 3.4% per year

"Smokers have a Death rate almost three times higher than that of Non smokers at all ages. Every ten seconds, somewhere in the Globe, Tobacco kills a Victim"

In India there are about 120 million smokers in the country (190 million exposed to some form of tobacco).Approximately 57% adolescent and 11% females (age group 15 years to 49 years) consume some form of tobacco.4% of youth (13-15 yrs) smoke cigarettes and 12% use other types of tobacco products.(**Walker J.A -2007**)

Tobacco users have become more common and it is a leading cause of incurable disease. More than 5 million people are dying and more are exposed to second hand smoke. The annual death will rise to 8 million by 2030 and in 21st century 1 billion could be killed because of using tobacco.

Now there are many legal actions undertaken by the government against the use of tobacco. Supreme Court of India has imposed a ban legally on smoking in public places, along with ban on selling tobacco products to minors, ban on advertising of tobacco products, prohibition of the sale of tobacco products within 100 meters of educational institutions and pictorial warning messages on packets. On 2nd November

2001, the supreme court of India banned smoking in public places and issued directions to all the state governments and the union territories to take necessary action to ensure the implementation of "Ban smoking". Since 1989, 31st May is observed as "World No Tobacco Day" to sensitize the government, communities, groups and individuals to become aware of the problem and take appropriate action.

On May 21, 2003 the World Health Assembly, the governing body of the WHO, adopted the resolution on tobacco control. The goal of the tobacco control programme is to reduce disease, disability, and death related to tobacco use. In India the two methods used are supply reduction and demand reduction. Supply is controlled via the Narcotics control bureau and central bureau of narcotics and customs. The demand reduction is the responsibility of the Ministry of Health and Family Welfare and Ministry of Social Justice and Empowerment, Government of India.

Anti tobacco campaign had taken an effort on 7th May 1990, prohibiting tobacco smoking in a few select places where a large number of persons were expected to be present for prolonged periods. These places were hospitals, dispensaries, educational institutions, conference rooms, air conditioned sleeper coaches in trains, and air conditioned buses. Further, it was directed that no ash trays be placed in such non smoking areas, and that all cigarette shops be removed from the compound of such buildings. State governments were advised by the central government to avoid sale of tobacco products around educational institutions. Even though government has taken a lot of efforts against anti tobacco our younger generations are still handling those tobacco products as peer influences.

"A strong positive mental attitude will create more miracles than any wonder drug". The present studies say counseling regarding quitting program, insisting knowledge regarding ill effects of using tobacco products through education, sharing affected person experience, media and video programs will surely change the attitude of the student". **(K. Srinath Reddy – 2009)**

By using audio visual aids we can make the teaching effective and accurate. Things seen are mightier than things heard. Visual aids - pictures, charts, maps, graphs,

photographs, cartoon etc are served through the sense of vision. It enhances the adult thinking capacity and helps them to reason things with proper understanding. These are usually pleasure to the eye, they help them to think and express new idea. This seeks the attention and add good atmosphere and can pass the message quickly.

The prevention of tobacco use in young will prevent non communicable disease in the world today. So we should arm them in an intellectual way. In order to render the knowledge, information regarding their level of knowledge and attitude is necessary. This practice will change their lifestyle during adolescent period.

NEED FOR THE STUDY

In earlier days, using tobacco was more common in the adult age group (20-40 yrs), but day by day it has become a habit and addiction. It causes decrease in life span and quality of life is lost. It not only affects them, it also affects the family, society, and whole community.

Curiosity, experimentation and peer pressure have been observed as one of the contributing factors for initiating into smoking and chewing tobacco among adolescents. Role model shown by parents particularly a smoking or chewing father and mother has been observed as an influence for initiating into its usage. There exists a belief that tobacco has healing and digestive properties also. Feeling of insecurity and anxiety often prompt a person to smoke and chew tobacco. Other factors include general rebellion, poor impulse control, unmet needs, poor social support, urbanization etc.Youth targeted media and advertisements influence the children's mind to acquire the use of tobacco. Glamour created by the heroes in movies also favours the use of tobacco.

The adolescents also undergo stress and pressure in the school. The compulsion of parents and the competition among children makes the condition even more worse. All these aspects can influence the adolescents to use any of the addictive substances. Many adolescents are misusing the pocket money for buying cigarettes, gutkha, beedi and pann. Many addictive substances are easily available in the shops, this favours the adolescents to buy and use it.

The **WHO** and center for disease control US has undertaken the Global youth tobacco survey. This survey focuses on 13 -18 yrs old school children using standardizing methodology. Among the sampled schools, response rate was 100% in 10 states in India. The study result revealed that 42% of children used smokeless form of tobacco products and 28% of children used cigarette.

Bondy LR (2004) conducted a study to assess the effect of video teaching programme on harmful effect of using tobacco products among adolescent boys in selected schools and colleges. The study used the video teaching method for 50 samples in experimental group. The result showed that 38% of boys gained adequate knowledge regarding their ill effects of using tobacco products and 62% of boys gained average knowledge.

The school teachers, parents and health care providers have an important role to prevent the adolescents who to use tobacco products. The school must create an environment that encourages anti-smoking beliefs and behaviors, the measures such as school smoke-free policies that are clearly and consistently communicated, applied, and enforced reduce smoking among students. School-based education programs to prevent and reduce youth to use tobacco products, but they have to be done right and provide specific training programmes for teachers.

The majority of parents do not want their children to smoke, for obvious reasons. Fortunately, parents can take a number of effective actions to protect their children from starting to smoke and to help the child those who are addicted. Initially, being good parents and role models is important, but it takes much more to prevent children from smoking. Parents must also work against pro-smoking influences outside the home, including efforts to ensure that schools are doing their best to prevent and reduce youth smoking.

In tackling the worldwide health crisis that is tobacco, nurses must first adopt the principle that prevention is better than cure. One approach is to actively discourage young

people from starting to use tobacco. Nurses can encourage peer-led prevention programmes for young people in which peers teach the social consequences of smoking. Films and videos which portray the short-term effects of tobacco use such as bad breath, smelly clothing, decreased athletic ability, and which detail the financial cost of smoking, are also a useful teaching medium for this group. Materials highlighting the long-term dangers of smoking such as cancer and other diseases may not seem relevant to younger people, but can be effective with adults. Nurses can also use their influence as health promoters to encourage smoking bans in schools, colleges and universities.

So the health providers should educate the adolescents to change their attitude towards addictive substances. By assessing their knowledge regarding the different aspects of addictive substances, continuing education can be given to improve their knowledge regarding the hazardous effects of addictive substances. There by risk of habit formation related to these addictive substances can be prevented.

Giving education and creating awareness regarding ill effects of using tobacco products among younger people is also a part of the nursing care. Providing educational information is the best method to explain about the effects of cigarette smoking, using tobacco products and its complications. Many of the studies also suggests that counseling and education through media will help the public to be aware of using tobacco products and its ill effects.

Some corrective measures are necessary to control this action by motivating the students to quit the habit of using tobacco products. So, we can self motivate them & educate through various medias like newspaper, posters, video teaching programme and changing their views & habits. It has a greater impact in changing the attitude of students to quit their usage of tobacco products.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore.

AIM

The aim of the study is to determine whether the audio visual display makes any difference in the level of awareness and attitude of adolescent boys (smokers & non smokers) with regard to tobacco products and its use.

OBJECTIVES

1. To assess and compare the level of knowledge of adolescent boys (smokers & non smokers) regarding tobacco products & its use prior to audio visual display.
2. To assess and compare the attitude of adolescent boys (smokers & non smokers) regarding tobacco products & its use prior to audio visual display.
3. To assess and compare the knowledge of adolescent boys (smokers & non smokers) regarding tobacco products& its use after displaying the audio visual aids.
4. To assess and compare the attitude of adolescent boys (smokers & non smokers) regarding tobacco products& its use after displaying the audio visual aids
5. To associate the level of knowledge of using tobacco products and demographic variables.
6. To associate the attitude of using tobacco products and demographic variables.

HYPOTHESIS

H1-There will be a significant difference between the mean score of knowledge of smokers and non smokers regarding using tobacco products& its effects before the intervention.

H2-There will be a significant difference between the mean score of attitude of smokers and non smokers regarding using tobacco products& its effects before the intervention.

H3-There will be a significant difference between the mean score of knowledge of smokers and non smokers regarding using tobacco products& its effects after the intervention.

H4-There will be a significant difference between the mean score of attitude of smokers and non smokers regarding using tobacco products& its effects after the intervention.

OPERATIONAL DEFINITIONS:-

EFFECTIVENESS

It refers to the result or outcome which in this study is the increase in awareness and a change in attitude towards tobacco products and its use.

ILL EFFECTS OF TOBACCO PRODUCTS:

The commercial tobacco products refer to all preparations that contain nicotine, the products considered in this study are cigarettes, cigars, bidee, pan, betel leaves, snuff powder and betel nut. All the products when used over a long period can cause harm to the body.

AWARENESS:

Awareness means personal opinion, ideas, thoughts, and views on comments gained through education, media, parents, and friends and exhibiting audio visual material. In this study awareness is explained in the various forms of using tobacco products, & its ill effects on human life.

ATTITUDE:

Attitude refers to the thoughts and feelings which are expressed by a person. In this study, attitude explores the feelings and views expressed towards the use of tobacco products. It can be positive or negative.

AUDIO VISUAL DISPLAY

Audio visual display refers to the putting up of material which contains health information which enables the person to see, hear, and interact and gain information. The materials included video, pictures, chart and live experience of the people, which make the learning experience more concrete.

ASSUMPTIONS

1 Usage of tobacco products is very common among adolescents.
2 Regular usage of tobacco products leads to addiction, & various health problems.
3 Using tobacco products can be prevented by self motivation through various education measures.
4 Usage of tobacco products among adolescent boys may be influenced by various factors such as family background, environment, peer group etc.

DELIMITATIONS

The study is delimited to

1 Adolescent boys of one school.
2 Adolescent boys aged between 15 -18 years.

LIMITATIONS

Data collection is based on self report, which may not reflect the true views and attitudes of the samples.

SCOPE OF THE STUDY

By assessing the knowledge in different aspect of ill effects of tobacco products, areas of decreased knowledge can be focused. The perception of adolescent boys regarding these habits helps to assess the level of favorable and unfavorable attitude

prevailing among adolescence. The influence of selected variables on the use of tobacco products will be revealed through findings. All these findings will help the health care provider to take appropriate action to create awareness among adolescent boys and their family members towards addictive substances contributing to ill health. The findings of the study will be useful to understand the nature of the problem. Also the findings will be useful to the Community Health Nurse, Teacher, and Headmaster to take remedial and preventive action towards use of tobacco products among adolescent boys.

CONCEPTUAL FRAMEWORK

Conceptual framework refer to inter related concepts or abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme.

As framework for determining the knowledge regarding ill effects of using tobacco products and behavior, the health belief model (Rosenstock & Becker's & Maiman, 1978) has been applied in this study.

The model provides a way of understanding and practicing how clients will behave in relation to health care therapy. This model proposes that people will not attempt to undertake preventive practices unless they believe that they are susceptible and vulnerable to health problems that are threatening to some aspects of their lives.

The model suggests the health behaviors are based on three factors.

1. Individual perception
2. Modifying factors
3. Likelihood of action

1. Individual perceptions

The first component in the model involves an individual perception of the effects and complication of using tobacco products and knowledge regarding practice of using tobacco products. The second component is the individual perception of the seriousness

of the illness. This is influenced and modified by demographic and socio physiological variables, perceived threat to illness and cues to action.

In the present study the sample perceives that the use of tobacco products is to attain pleasure, to get relief from stress and to maintain friendship and they have less knowledge regarding the adverse effects of smoking and tobacco chewing.

2. **Modifying factors**

The perception of using tobacco products is influenced by demographic variables which include age, sex, race, ethnicity and psycho physiological variables that are personality, social class, peer and reference group pressure. In this study demographic variable includes age, sex, family income, education of parents, family habits, habits of parents related to using tobacco, knowledge regarding using tobacco products and attitude towards using tobacco products. The perceived threat of illness like oral lesions, lung diseases, cancer, heart disease, gum disease, increased risk of stomach ulcer, suicides, breathing problems, accidents, and threat from family members are low. Cues to action include mass media campaigns and advice from family, friends and medical professionals. In this study cues to action includes mass media, advice from teachers / parents, Observation of symptoms exhibited by patients/relatives and Newspaper or magazine article.

3. Likelihood of action

A client's perception of susceptibility to disease as well as his perception of the seriousness of an illness helps to determine the likelihood that the client will or will not partake in healthy behaviors. In this study the perceived benefits of preventive action includes good knowledge, healthy life, and better socio- emotional benefits. The perceived barrier to preventive action includes lack of knowledge, peer pressure, low motivation and lack of parental attention. The likelihood of action consists of adopting healthy lifestyles, maintaining adequate knowledge regarding ill effects of using tobacco products and positive attitude towards prevention of using tobacco products.

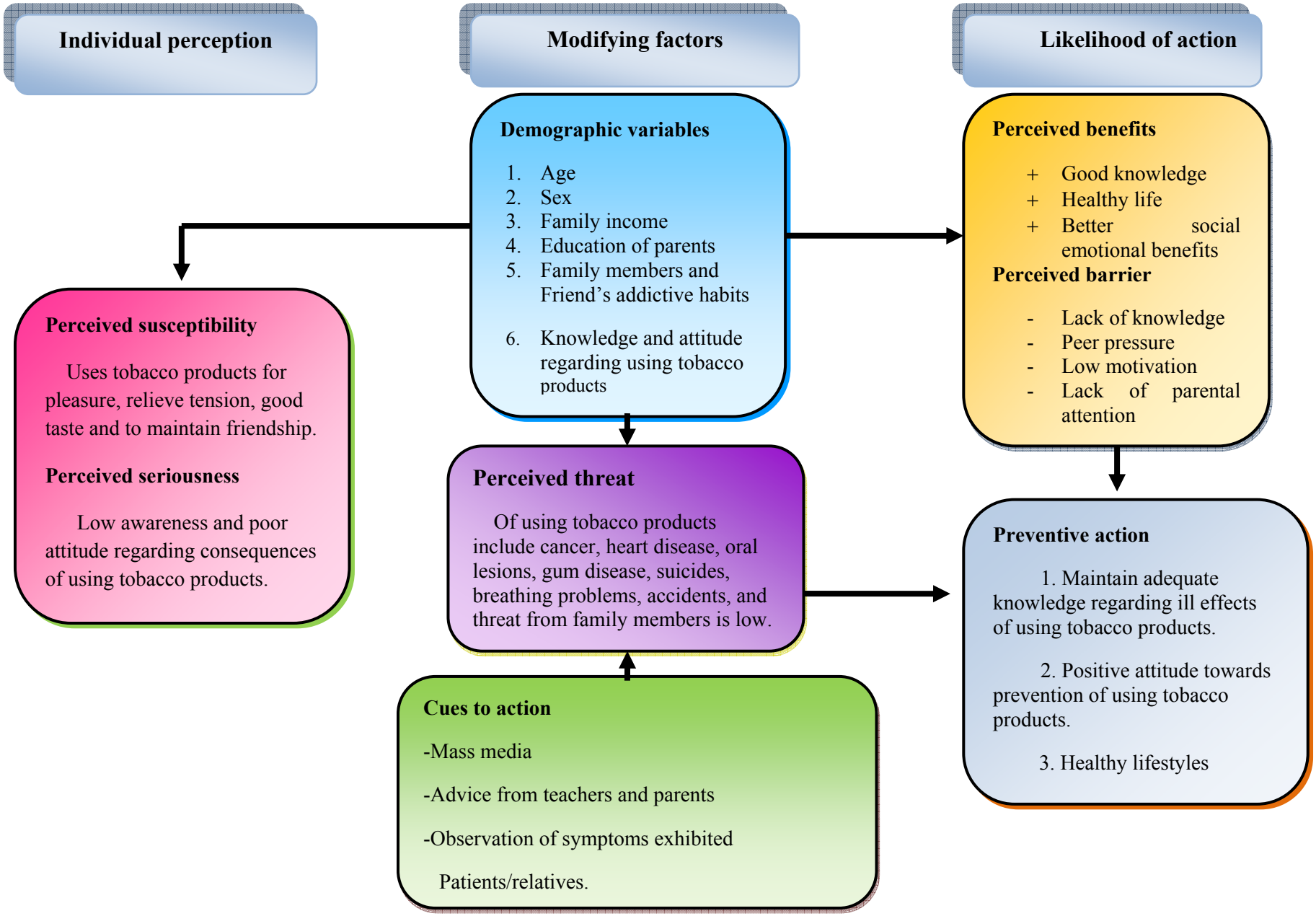


Figure 1- CONCEPTUAL FRAMEWORK BASED ON ROSENSTOCK AND BECKER'S "HEALTH BELIEF MODEL (1978).

CHAPTER –II

REVIEW OF LITERATURE

According to **Hulme and Groves (1994)** review of literature is a systematic identification, location, scrutiny and summary of written materials that contain information on research problems. The review of literature in a research report is a summary of current knowledge about a particular problem of practice and includes what is known and not known about the problem.

According to **Polit and Hungler (1999),** review of literature is a critical summary of research on a topic of interest generally prepared to put a research problem in context or to identify gaps and weakness on previous studies to justify a new investigation.

The researcher came across numerous theoretical and empirical literature related to the topic under study. The relevant and related literature reviews gathered for this study were categorized under 4 headings:

1. Studies related to smokeless form of tobacco use
2. Studies related to smoking
3. Studies related to health impact of tobacco use
4. Studies related to tobacco control policies & intervention to reduce the tobacco use

STUDIES RELATED TO SMOKELESS FORM OF TOBACCO USE

D.N Sinha (2003) conducted a "Global Youth Tobacco Survey" in North Southern state of India, with the objective of obtaining information on intensity of gutkha, pann and snuffing powder advertisements targeting the youth in the states of India. A two stage probability sample of students in grades 10-12 corresponding to the ages 15-18 years was selected in each of the states and surveyed through anonymous self administered questionnaire. Totally 300 students were included. The result showed that 90% of students saw actors using pann, and gutkha on television, pann brand names on television and smokeless tobacco advertisements in newspaper / magazines. Over 10% of the students in all states thought that boys and girls who chew tobacco have more friends

and look more attractive. In all states, majority of the students were exposed through almost all possible media. This resulted in a high prevalence of smokeless tobacco use among them. Over 40% currently use smokeless forms of tobacco.

Kaur S, Singh S et al (2002) conducted a study to identify the cause for high levels of gutkha intake among students in Punjab villages. A random survey was conducted among 100 students from five schools to rule out the extend of gutkha use. Of the 66 students found using gutkha, it was seen that 19 had the habit of chewing gutkha every day, and 16 said they took gutkha 2 to 3 times a week. Most of the users started the habit in 7th or 8th standard. The majority, 97% of the students were aware of gutkha. Nearly 60% developed the habit of tobacco use from the school period, and one third started by being attracted through advertisements on TV and magazines.

Nichter SM, Sickle DV et al (2004) conducted a study on tobacco use among male school students in Karnataka with the objective of assessing use of smokeless tobacco products among school students in Karnataka. A simple random survey was conducted among 1,606 male students who were between the age of 15-20 years through self administered questionnaire. The result showed that 36% had tried chewing pann and 18% had never tried chewing gutkha. Over 80% believed that chewing smokeless tobacco products were increased among school boys. Students thought that smokeless tobacco could relieve tension and boredom and give a kick.

Dennis V Ary, Edward Lichtenstein (2004) conducted a study on smokeless tobacco use among male adolescent boys for the objective of identifying the smokeless tobacco use among adolescents boys in Pune. A descriptive study was conducted among 500 adolescents through self administered questionnaire. The results showed that 60% of boys had tried smokeless tobacco, and 7% used it daily. Daily users reported an average of 5.3 users per day. Among boys the prevalence of smokeless tobacco use in the past six months 18.8% was higher than that for cigarette use 10.4%. For 86% of boys, the initial use of smokeless tobacco occurred in a social setting with other boys.

A study conducted by **Cheryl Healton (2003)** showed that chewing tobacco was more common in the rural areas. Nearly 45% of them consumed pann and gutkha.

Monika Arora, Vinay K Gupta (2004) conducted a study on impact of smokeless tobacco advertisements on tobacco use among urban adolescents in India**.** Nearly, 1312 adolescents participated in the study. The results showed that students exposed to tobacco advertisement at more than four places were 1.5 times (95%) more likely to progress towards smokeless tobacco use at end line versus those not exposed. Among boys 95% were exposed to smokeless tobacco advertisement and practiced tobacco use regularly.

David E. Nelson, MD, MPH, and Paul Mowery (2006) conducted a study on trends in smokeless tobacco use among adults and adolescents in the United States with the objectives of assessing use of smokeless tobacco products among adults and adolescents in the United States. A descriptive study was conducted among 1000 adolescents through self administered questionnaire. The study showed that 52% of boys were addicted to pann, 36% of boys were using gutkha and 12% of boys were using snuffing powder.

A study was conducted by **Vaidya SG, Vaidya NS, and Naik UD (2004)** on epidemiology of tobacco habits in Goa, India. In their study, thirty-one schools were randomly selected from 73 villages, and self-administered questionnaires were administered to 6271 children. About 13.4% of boys and 9.5% of girls used tobacco, mostly in the smokeless forms. They started to use it from fifteen years of age and most were introduced to tobacco use by family members and friends.

A study was conducted by **Jennifer Cullen PhD (2007)** in Mumbai among ten schools. The questions were self administered. The study revealed that out of the 100 students covered by the study 72 were using gutkha, 55 of them consumed it every day and 22 said they consumed it 2-3 times a day. Most of them said that they started using gutkha when they were studying in the 9th and 10^{th} standards.

A study conducted by **Jayant K (2003)** in Bombay among ten schools revealed that out of 1278 boys and 353 girls covered by the study 86% boys and 1.1% of girls were using it in chewing form .

A study carried out by **VYDEHI** Institute of Health and Medical Sciences in Bangalore in **2004** revealed that 72 % of tobacco chewers were students and 75% of them were between the age group of 10-26.

STUDIES RELATED TO SMOKING

Sinha, Pednekar MS et al (2004) conducted a study on tobacco use among students in Eight Northeastern states of India. The study had the objective of obtaining baseline information about prevalence of tobacco use among school children. A two-stage probability sample of 250 students in grade 10-12 corresponding to 15-18 years of age were selected in each of the states and a self administered questionnaire was used. In the study among the North-eastern states, Mizoram reported the highest smoking (mainly cigarette) prevalence 34.5% and Assam reported the lowest smoking (mainly cigarette) prevalence 19.7%. Cigarette smoking 8.6% - 23.1% was the most preferred form of smoking among students in all North-eastern states of India.

Manjesh Pednekar, Prakash C (2000) conducted a study on tobacco use in 50 selected schools of Bihar & Maharashtra. A two stage cluster sample design was used for the determination of the prevalence and attitudes about tobacco products. The questionnaire were self administered without any identifying information of the 2636 respondents, 72% (76.5% boys, 51.2% girls) were tobacco users, of them 45.9% had used tobacco before 15 years of age. Current use was reported by 58.9% (boys 61.4%, girls 51.2%), and smoking by 19.4% (boys 23.0%, girls 7.8%). Almost all students reported watching cigarette and beedi advertisements in almost all kinds of media and events. Tobacco use by parents and friends, knowledge on harmful effects of smoking and attitudes on tobacco use by others were strongly associated with student tobacco use. Teaching in schools regarding harmful effects of tobacco use was nonexistent. This urgently requires a comprehensive prevention programme in schools and the community especially targeted towards girls.

A study conducted **by WHO (2002)** revealed that over 80% of 400 film studied have shown tobacco use. According to Ms.Ambika Srivastava, president, strategic Media work, who conducted the study on behalf of WHO reported that, in India alone, 15

million people see Indian films every day. Around 76% of the top rated films portray smoking.

Anderson Johnson, Xinguang Chen, Ping Sun (2004) conducted a study on family characteristics and smoking among urban and rural adolescents living in China .Survey data on psychosocial variables and smoking were collected from 3629 samples, who were 10th grade adolescents (46% female, 54% male).For adolescents, past 30-day smoking, family relationships, parents' negative sanctioning of smoking, parents' agreement with smoking and parents' smoking behaviors were assessed. The study result showed that girls are less likely than boys to report smoking and are more likely to report positive family relationships, and having parents with negative attitudes towards smoking. Positive family relationships and age were strongly associated with smoking for both genders.

Jennifer Cullen, PhD, MPH; Natasha A (2003) conducted a study on factors related to adolescents estimation of peer smoking prevalence in Canada with the purpose of examining demographic, social, environmental and behavioral characteristics related to overestimation of peer smoking prevalence among higher secondary school students. a school-based questionnaire was administered. One study surveyed 23,458 students (Grades 9–13) in 29 schools during 2001–02, and the other surveyed 25,452 students in 39 schools in 2003. The study results showed that multiple logistic regression indicate that grade, gender, close friends smoking, seeing smoking at school, family members smoking, smoking in the home and smoking status had a clear association with overestimation.

Carter-Pokras O, Macpherson L, Kanamori M, Zhang G, Chen L (2006) conducted a study on Peers, about tobacco advertising, and secondhand smoke exposure influencing smoking initiation in diverse adolescents in USA. With the purpose of identifying demographic, social, and environmental factors associated with smoking initiation a cross sectional sample design was used. In this study, 308 middle and high schools children in aged between 12-17 years were participated. The study result showed that smoking initiation was positively associated with higher age, living with a current

smoker, secondhand smoke exposure, and exposure to advertisements for tobacco products.

A **study was conducted** by **Ranabir Pal (2007)** on substance use among adolescent high school students in India. The study result showed that among 416 students, 52 (12.5%) used or abused any one of the substances irrespective of time and frequency in lifetime. More than two-thirds 73.07% of the respondents expressed a desire to quit substance use and 57.69% had tried to stop. Level of knowledge on harmful effect of substance use among students were very high (Urban -84.6% and rural - 61.5%) and they stated media as the most frequent source of information. However, urban 15.4% and rural 26.9% users were successful in influencing their peers into taking up this habit.

STUDIES RELATED TO HEALTH IMPACT OF TOBACCO USE

Mr. Glantz's Research (2000) which is published online by the **British Medical Journal** is the first to report a strong link between smoking and heart attacks. Only 30 people were admitted to the city's heart hospital with a heart attack during the six months when there was a ban on smoking compared to an average of 45 during the same period in the year before the law was imposed and after it was overturned.

In **1984, Gary Giovino, Stephen Marcus M.D Surgeon General** of the United States, released the report of the Surgeon General Advisory Committee on smoking and health. It was based on over 8000 scientific articles that linked tobacco use with cancer and other diseases. This report led to laws requiring warning labels on tobacco products and restrictions on tobacco products and restrictions on tobacco advertisements. From this time, Americans became much more aware of the dangers of tobacco and surprisingly, its use in the United States began to decline. By 2004, nearly half of all Americans who had ever smoked had quit.

A study **conducted by The Division of Epidemiology and Cancer Registry at the Cancer Institute (2004)** in Chennai. The study aimed at analyzing death data on individuals who died after the age of 25 years. A baseline survey was conducted among 120 numbers of all individuals and close family members aged 35 using house - to -

house approach and face to face interviews. The study result showed that one-third of male deaths at ages 25-69 years are related to tobacco use. In response to the findings, the Division has organized public education programmes, like lectures and handbill campaigns in both study areas.

Division of Cardiology, K D Gupta Medical Centre, Jaipur (2002) conducted a study to assess the Influence of cessation of smoking on long term mortality in patients with coronary heart disease. Totally 173 patients with Coronary Artery Disease were selected and compared the mortality of this group with 299 nonsmokers and 52 current smokers**.** The baseline data were identical for major risk factors like age, hypertension, diabetes, cholesterol levels, and congestive heart failure among the three groups. The result showed that 40.4% current smokers and 25.4% nonsmokers were affected by coronary artery disease. The total mortality was 28.1% in nonsmokers, 32.4% in ex smokers, and 46.2% in current smokers.

Tata Memorial Centre, Bombay (2000) conducted a study on Tobacco and Health. The study reports revealed that mortality experience of tobacco users (including chewers and smokers) in India was higher and they started to use tobacco for 15 years and over. They experienced significantly higher mortality than nonusers. Among men tobacco was used by 60% to 80% but among women there was a wide variation, between 15% to 67%.Total number of deaths caused by tobacco by all known and unknown causes were thus estimated as at least 630,000, possibly higher, up to a million each year.

Ramchandran CR (2003) conducted a study on Tobacco and Health. The study result showed that about 1/3 of all cancer admissions to Madras General Hospital were because of cancer of cheek associated with tobacco chewing. National Cancer Registry Programme (NCRP) of the Indian of Medical Research provides data that nearly one third of all cancer cases that occur in the country are attributed to tobacco use. The data showed that oral cancer predominantly occurred amongst the working class, almost equally amongst male and female tobacco users. Studies from India had shown that a tobacco smoker carried a threefold higher risk of a coronary heart disease (CHD). Death due to CHD was about three times higher among smokers as compared to nonsmokers.

Gupta D, Aggarwal AN, Kumar R, Jindal SK (2001) conducted a study on Prevalence of bronchial asthma and association with environmental tobacco smoke exposure in adolescent school children in Chandigarh, north. The sample of 9090 students in the 9 to 20 year age range was included in the study. The study report showed that there were 4367 (48%) boys, in whom the observed prevalence of asthma was 2.6%. Among 4723 (52%) girls, asthma was present in 90 (1.9%) students. Presence of one or more respiratory symptoms was reported by 31% students. More students with asthma had either parents or other family members smoking at home as compared to non asthmatics.

Anon (2005) conducted a study on adverse effects of tobacco use among children and youth as Consumers. The study reported that smoking was a long established custom, about 90% of lung cancer cases, 30% cases of bronchitis and emphysema were 20% of coronary heart disease and stroke deaths attributable to tobacco use. This has serious implications for the health of children and young people. The earlier they become regular smokers and persist in the behavior as adults the greater the risk of dying prematurely.

STUDIES RELATED TO TOBACCO CONTROL POLICIES & INTERVENTION TO REDUCE THE TOBACCO USE

Samira asma, Vaidya SG (2002) conducted a study on school policy and tobacco use by students in Bihar. A two stage cluster sample design was used to produce a state representative sample of adolescent boys aged between 14-19 years. The questionnaire between school tobacco polices and tobacco use prevalence among students were examined. Comparison was made between schools with a tobacco policy (federal schools) and schools without a policy (state schools). Students from state schools reported significantly higher tobacco use compared to federal schools in rural and urban areas.

Gavarasana S, Doddi VP, Prasad GV, Allam A, Murthy BS (2003) conducted a study on a smoking survey of school students in India and its implications for designing an antismoking policy. The survey of 599 school students was conducted in Andhra Pradesh, in order to formulate an anti-smoking policy for youth. There were 64.6% boys

and 35.4% girls between 15 and 22 years of age and 8.2% of students who were smokers participated. The policy included ban on advertising of tobacco products, smoking in public places and teachers smoking in school.

Gupta PC (2000) conducted a study on the case against gutka in New Delhi, India. He mentioned that over 20,000 adults in Gujarat in the 1990s found to have a prevalence of Oral sub mucous fibrosis of 11% among mawa users, whereas it had been 0.2% in the same district in 1967. The increase rate was attributable to increased use of areca nut products. Public interest litigation was filed in a State High Court about trying and curbing and regulating gutka promotion and use. The Central Committee on Food Standards conducted hearings and investigations, and concluded that gutka is dangerous, and recommended an outright ban. The feedback got from the gutka lobby fought against the ban, and one manufacturer said: "Gutka is harmful and we do not object to a ban, but cigarettes should be banned first." This indicates that all the tobacco products are more harmful and must be banned.

Anantha N, Nandakumar A, Vishwanath N, Venkatesh T (2007) conducted a study on efficacy of an anti-tobacco community education program in India. The two main objectives were to enable the individuals to quit using tobacco and smoking as well as to prevent the individuals from using tobacco and smoking. So they conducted a baseline tobacco use survey of the population which was followed by anti- tobacco education of the community by specially trained primary health personnel. Methods of health education included screening of films, exhibits, and personal contact with a display photographs of the harmful effects of tobacco. The result showed that quit rates were 26.5% in males and 36.7% in females. Among men, a higher proportion 30.2% gave up chewing than smoking 20.4%.

Dhirenda N.Sinha, Madhumita Dobe (2002) conducted a study in selected districts of Bihar to evaluate the effectiveness of intensive vs minimal, community centered vs clinic / camp centered and mass / group vs individual targeted intervention programmes, for cessation of tobacco use. Qualitative and quantitative data were collected before, during and after intervention. Quantitative data was collected through structured pre tested schedule. Qualitative data was collected through participatory rapid

appraisal techniques. The study demonstrated that community centered mass approaches with minimal sustained intervention was more effective than clinic centered, intensive and individual approach. There were noticeable changes in attitude and behavior of students in the age group of 15-19 years at intensive intervention site. Among 600 students examined in pre and post intervention period, it was seen that current tobacco use reduced pre 67% vs 34%, attitude towards tobacco use in future pre 12% vs 3%, improved following class room instructions on harmful effects of tobacco. In post intervention phase significantly large number of students 32% prevented others from smoking in front of them to avoid passive smoking as compared to the pre intervention periods 3%.

Herbert H. Severson, Russell Glasgow (2000) conducted a study to assess the effectiveness of class room intervention for preventing the use of smokeless tobacco and cigarettes by teens. With the purpose to evaluate the efficacy of a school-based smokeless tobacco and cigarette smoking prevention/cessation program. This multicomponent intervention program was delivered by regular classroom teachers or same age peer leaders, and was presented to intact classrooms in randomly assigned schools. The program emphasized refusal skills training. A total of 2552 students in 13 middle schools and nine high schools began the study and 1768 were assessed at 1-year follow-up. These results provide limited support for the efficacy of the smokeless tobacco intervention program, but also suggest the need for different types of intervention programs capable of impacting a larger percentage of high risk adolescents.

Aghi MB, Gupta PC, Mehta FS, Pindborg JJ (1992) conducted a study on an intervention study of tobacco habits among rural Indian villagers. In a house-to-house screening survey, among 36,000 tobacco chewers and smokers were selected through house- to- house survey from three districts of three States in India namely Kerala, Andhra Pradesh, and Gujarat. These samples were interviewed and examined for the presence of precancerous lesions in a baseline survey over 9 years. And they were educated through personal communication as well as mass media to give up their tobacco habits. The results have indicated consistently that it is possible to induce changes in

tobacco use of rural populations through educational efforts. This study demonstrated that the primary prevention of oral cancer was feasible, effective, and practicable.

Bhonsle RB and Murti PR (2004) conducted a study on communication strategies for intervening in the tobacco habits of rural populations in India**.** A 10-year prospective intervention study was conducted in three rural areas among 36,000 tobacco users in India with the objective of behavioral modification and habit cessation. On the basis of these studies, several communication inputs were designed such as personal communication, films, posters, folk-drama, radio programmes, cessation camps, dental treatment and newspaper articles. Pre test was conducted and the population was exposed to them in measured doses. These approaches were found suitable and brought about habit cessation in 14% of the tobacco users. Personal communication which afforded one-to-one interaction was the most preferred input by the population.

CONCLUSION

The review of literature enlightened the investigator to develop an insight into the ill effects of tobacco use, awareness program and its effects were elicited through the review of literature which shows the studies that were conducted to reduce the level of using tobacco products, and specifically creating the awareness before they began to use tobacco products have been shown effectively. These reviews helped the investigator to gain a deeper knowledge of the research problem and guided in designing the study.

CHAPTER – III

RESEARCH METHODOLOGY

Methodology of research organizes all the components of the study in a way that is most likely to lead to valid answers to the problems that have been posed (Burns and Grove, 2002).In this study it refers to various logical steps that are generally adopted by the investigator in studying the research problem

This chapter presents the research design, setting, population, sample size and sampling technique, sampling criteria, tools used, construction of the tools, validity, reliability, pilot study, and data collection adopted for the study.

RESEARCH APPROACH

The research approach is an overall plan chosen to carry out the study. The selection of research approach is the basic procedure for the conduct of research inquiry. An evaluative approach was used in this study as the study aimed at assessing the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitude of adolescent boys towards using tobacco products.

RESEARCH DESIGN

One group pre test and post test design was used.

O1……X……..O2

O1: Assessment of knowledge and attitude of adolescent boys prior to audio visual display.

X: Information through exhibiting audio visual material

O2: Assessment of knowledge and attitude of adolescent boys after displaying audio visual material.

VARIABLES IN THE STUDY

Independent variable

Audio visual display regarding ill effects of tobacco products.

Dependent variable

Awareness and attitude towards using tobacco products.

SETTING OF THE STUDY

"Setting" refers to the area where the study is conducted. The study was conducted in Government Boys Higher Secondary school which is situated in Sulur, Coimbatore. There are about 1500 students studying in the school. The school has classes from first standard to plus two. It is a Tamil medium school. Both rural and urban children are studying in the school. There are many petty shops surrounding the school. The Government Boys Higher Secondary school was selected for the study on the basis of availability of samples in the specific period, feasibility of conducting the study and geographical proximity.

POPULATION

The population for the study was 580 adolescent boys aged 15-18 years studying in the selected school from 10^{th} to 12^{th} standard. (10th standard = 185 students, 11th standard = 205 students, 12^{th} standard= 190 students)

SAMPLE SIZE

The samples were 150 adolescent boys studying in the selected school from 10^{th} to 12^{th} standard (50 students from each standard).

SAMPLING TECHNIQUE

In this study simple random sampling was adopted. A sampling frame was made for the three standards (10^{th} standard to 12^{th} standard). Then from each sampling frame 50 students were selected for the study using lottery method. The 50 students selected from each standard were the representative sample from each class.

SAMPLING CRITERIA

The following were the criteria for selection of samples for the study.

Inclusion criteria

- Adolescent boys only.
- Age group between 15 to 17 years studying 10^{th} – 12^{th} standard.
- Adolescents who understood Tamil and English.

Exclusion criteria

- Adolescents who were unwilling to participate
- Students age below 14 yrs.

RESEARCH TOOL

The tools used for the study were a structured questionnaire and attitude 3 point scale. The techniques used for data collection was interview.

The structured questionnaire consisted of two parts. (Appendix – VI)

PART – I

This part was designed to collect demographic data which include variables like age, family income, parental education, parental occupation, family habits and habits of the students.

PART – II

This part was designed to assess the knowledge on using tobacco products & its ill effects before and after intervention. There were 25 questions that were focused on different aspects such as facts about tobacco products, factors influencing using tobacco products and information on effects, treatment & prevention. The questions were of multiple response and multiple choice type. The numbers of questions in different aspects of knowledge were 8 questions on facts about tobacco products, 5 questions on factors influencing using tobacco products and 12 questions on effects, prevention and treatment.

ATTITUDE SCALE

The attitude scale was to assess the attitude on using tobacco products & its ill effects before and after intervention. There were 20 statements (9 positive and 11 negative statements) focused on two aspects smoking habits with 10 statements and effects & prevention with 10 statements. A three point Likert rating scale (agree, not sure, disagree) was provided to rate the response and mark in the column provided.

SCORING

For the assessment of knowledge each correct answer was given a score of one and each wrong answer was given a score of zero. The maximum score for the knowledge regarding facts about tobacco products was 14, factors influencing using tobacco products were 14 and effects, treatment & prevention was 12.

For attitude scale the score was assigned as follows: agree -2, not sure –1, disagree -0

The maximum score for the attitude regarding smoking habit was 20 and effects & prevention were 20.

SCORING INTERPRETATION

The level of knowledge was graded as follows:

Score	Grading
27-40	Good
14-26	Average
0-13	poor

The level of attitude was graded as follows:

Score	Grading
27-40	favourable
14-26	Moderately favourable
0-13	unfavourable

DEVELOPMENT OF THE TOOL

The tool was developed based on the objectives of the study, review of the literature, and discussion with experts. The investigators own experience with ill effects of using tobacco products contributed in developing the tool.

VALIDITY OF THE RESEARCH TOOL

The research tool including the objective of the study along with the criteria checklist was validated by five experts- three Nursing experts, one Research expert and one General Physician. The three nursing experts were professors with Master Degree in Nursing and working in different colleges of Nursing in Coimbatore with more than 5 years of experience.

The general physician was working in a private hospital in Coimbatore for more than 15 years.

RELIABILITY OF THE RESEARCH TOOL

The reliability of the attitude scale and knowledge questionnaire was established by test re test method. The attitude scale and knowledge questionnaire was administered to students in RVS School as an initial test. 12 students participated for the reliability assessment. The same questionnaires were administered to the same students 12 days later to test the reliability. Correlation of co efficient was calculated by Karl Pearson's method.

The correlation coefficient of the knowledge questionnaire was found to be r = 0.908 and the attitude scale was found to be r = 0.966. Both these indicated a high positive correlation and internal consistency of the tool.

PILOT STUDY REPORT

A pilot study was conducted in the selected Government Boys Higher Secondary School, Sulur after getting permission from the headmaster and contacting the class teachers of 10^{th}, 11th, 12^{th} standards. There were 20 students who were selected by simple random sampling method – lottery methods from each class 7 students were

selected. With the help of class teachers the students assembled in a class room. After a self introduction the purpose of the study was explained. Later consent was obtained and the tool was self administered as pre test. It took 45 to 60 minutes to complete the questionnaire.

Then audio visual materials were displayed for 6 days. On the 1st to 6th day the audio visual materials were displayed. First day the researcher allowed the students to visit the audio visual display during class time. The researcher explained the each audio visual material and encouraged the students to ask questions and clarified to them. Next day onwards students attended the exhibition during their free hours. The researcher maintained an attendance list to ensure that the selected samples attended the exhibition. On the 7th day video teaching program was conducted. On the 8th day live experience of the people was shared with the students. Then on the 22nd day, the questionnaires were administered to the 20 samples as post test. The total period of data collected was 22 days. The students were reassured that their answers would be kept confidential. In that the audio visual material were exhibited in a separate room, with no accessible other students. Therefore no contamination with other students. The pilot study showed that the tool and technique were adequate. Hence no modification was required.

DATA COLLECTION PROCEDURE

A formal written permission was obtained from the Headmaster of the selected Government Boys Higher Secondary School, Sulur. Permission was taken from the concerned class teachers. The purpose of actual procedure was explained to them. The date and time for the study was also confirmed with them.50 students from each standard 10th, 11th, and 12th were selected by simple random method. From the selected sample each day, 50 students were gathered together in a room. The researcher gave a self-introduction and after explaining the purpose of the study and obtaining their consent the questionnaire was self- administered as pre test. The students were requested not to share the information with other students. Confidentiality of their responses was assured. Using the same method, data was collected from 150 students. The average time taken for completion of the questionnaire was 45 to 60 minutes.

Then audio visual material was displayed for 6 days. On the 1st to 6th day the audio visual materials were displayed. First day the researcher allowed the students to visit the audio visual material in class time. The researcher explained the each audio visual material and encouraged the students to ask questions and clarified to them. Next day onwards students attended the exhibition during their free hours. The researcher confirmed that all the selected samples attended the made exhibition with the help of an attendance list. On the 7th day video teaching program was conducted on ill effects of using tobacco products. On the 8th day live experience of the people was shared to the students. Then on the 22nd day, the questionnaires were administered to all the 150 samples as post test in one group. The total duration of data collection extended over a period of one month.

PLAN FOR DATA ANALYSIS

The data obtained would be analyzed in terms of the objectives of the study using descriptive and inferential statistics.

Descriptive statistics

Frequency, percentage mean, mean score and standard deviation were used to analyze the demographic data, the level of knowledge and attitude of adolescent boys with regard to ill effects of using tobacco products.

Inferential statistics

Chi-square was used to find out the association between knowledge of adolescent boys with selected variables and the association between attitudes of adolescent boys with selected demographic variables regarding ill effects of using tobacco products.

't' test was used to determine the significant difference in smoker's and nonsmoker's knowledge and attitude.

ETHICAL CONSIDERATION

Nature, purpose and type of the study were explained and obtained the verbal consent of the students. Adequate explanation was given whenever they asked questions, and records were maintained for each student confidentially. Permission was obtained from higher authorities of the schools.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

Data analysis is conducted to reduce, organize and give meaning to the data. Analysis technique in quantitative research includes descriptive and inferential analysis.

This chapter deals with the analysis and interpretation of data collected from 150 adolescent boys in school to assess the knowledge and attitude towards ill effects of using tobacco products prior and after displaying the audio visual aids.

The data have been presented under the following sections

Section - 1 Demographic characteristics of the sample

The personal characteristics of the students and the use of tobacco products by family members and friends have been presented comparatively for smokers and nonsmokers in frequency and percentage.

Section - 2 Knowledge of adolescent smokers and non smokers regarding tobacco products and its use.

Knowledge of adolescent with regard to tobacco products and its use has been presented in three levels (good, average and poor) in different aspects of knowledge and overall before and after intervention in frequency and percentage. Also in mean score and its level of significance has been examined.

Section – 3 Attitude of adolescent smokers & non smokers regarding tobacco products and its use.

Attitude of children with regard to tobacco products and its use has been presented in three levels (favourable, moderately favourable and unfavourable) in two aspects of attitude and overall before and after intervention in frequency and percentage. Also in mean score and its level of significance has been examined.

Section – 4 Association of selected demographic variables with overall knowledge and attitude after intervention.

SECTION – I DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLES

TABLE-I

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS & NON SMOKERS ACCORDING TO DEMOGRAPHIC CHARACTERISTICS

N = 150

S.No	Characteristics	Non smokers N = 106		Smokers N =44	
		f	%	f	%
1.	**Age**				
	a. 15 years	37	34.9	1	2.30
	b. 16 years	33	31.1	18	40.9
	c. 17 years	27	25.5	21	47.7
	d. 18 years	9	8.50	4	9.10
2.	**Standard**				
	a. 10^{th} std	50	47.2	2	4.50
	b. 11^{th} std	27	25.5	21	47.7
	c. 12^{th} std	29	27.4	21	47.7
3.	**Family monthly income**				
	a .Rs. <1000	6	5.7	-	-
	b. Rs. 1001-Rs.3000	13	12.3	4	9.10
	c. Rs. 3001-Rs.5000	47	44.3	23	52.3
	d. Rs. >5000	40	37.7	17	38.6
4.	**Education of father**				
	a. Illiterate	1	0.90	2	4.50
	b. Primary education	42	39.6	17	38.6
	c. Secondary education	57	53.8	25	56.8
	d. Graduate	6	5.70	-	-
5.	**Education of mother**				
	a. Illiterate	16	15.1	3	6.80
	b. Primary education	36	34.0	18	40.9
	c. Secondary education	47	44.3	19	43.2
	d. Graduate	7	6.60	4	9.10

Table -I presents frequency and percentage of adolescent smokers and non smokers according to personal characteristics.

Age

The age of the adolescent boys ranged from 15 to 18 years. In non smokers majority of the samples 37 (34.9%) were in the age group of 15 years, 33 (31.1%) and 27 (25.5%) of the samples were in the age group of 16 and 17 years, and the remaining were in the age group of 18 years. Whereas among smokers, majority 21(47.1%) and 18(40.9%) of the samples were in the age group of 16 and 17 years and the remaining were in the age group of 15and 18 years.

Standard

In non smokers half of the samples 50(47.2%) were in the 10^{th} standard and 27 and 29 in the 11^{th} and 12^{th} standard almost equally distributed whereas in the smokers 21(47.7%) of the samples were distributed in 11^{th} and 12^{th} standard and only 2 were in the 10^{th} standard.

Family income

The family income ranged from below Rs.1000 / month to above Rs.5000 /month. In the non smokers and smokers most of the families had the monthly income between Rs. 3000-5000 / month.

Education

In the non smokers, 53.8% of the fathers had secondary education, 39.6% of the fathers had primary education and remaining were graduate. Whereas in smokers majority of the fathers 25 (56.8%) had secondary education and 38.6% of the fathers had primary education. In both the groups, only an insignificance number of samples were illiterate.

In non smokers among mothers, majority 47(44.3%) had secondary education and least amount of samples 7 (6.6%) were graduate. Whereas among smokers majority 19 (43.2%) had secondary education and only 4 (9.1%) of the samples were graduate.

TABLE - II

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS & NON SMOKERS ACCORDING TO USE OF TOBACCO PRODUCTS

N = 150

S.No	Characteristics	Non smokers N = 106		Smokers N =44	
		f	%	f	%
1.	**Type of habits**				
	a. Smoking	-	-	18	40.9
	b. Smokeless tobacco products	-	-	26	59.1
	c. Nil				
		106	100	-	-
2.	**Introducer of the habits**				
	a. Friend				
	b. Family members	-	-	21	47.7
	c. Influence of media	-	-	11	25.0
	d. Any other	-	-	11	25.0
		-	-	1	2.30
3.	**Used by family members**				
	a. Cigarette				
	b. Beedi	11	10.4	9	20.5
	c. Gutkha	1	0.90	2	4.50
	d. Pann	7	6.60	3	6.80
	e. Snuffing powder	8	7.50	6	13.6
	f. Nil	4	3.80	1	2.30
		75	70.8	23	52.3

Table –II presents the frequency and percentage of adolescent smokers & non smokers according to use of tobacco products.

Type of habits

The habits present among the smoker among adolescents were smoking and using smokeless form of tobacco such as cigarette, beedi, gutkha, pann & snuffing powder. The prevalence of smoking was seen among 18 (40.9%) samples and 26 (59.1%) of the

samples used smokeless tobacco products. These habits were not present among the non smokers.

Introducer of the habits

The four sources of introducing habits of tobacco use were family, friends, influence of media and others such as neighbors and relatives. Among these sources outstanding introducers were friends 27 (47.7%) and equal distribution was given by family members and media namely 11 (25.0%)

Used by family members

Tobacco products not used by the family members of non smokers 23 (52.3%) and smokers 75 (70.8%). In the non smokers, 8-11 (7.50%-10.4%) and in smokers 6-9 (13.6%-20.9%) of family members used cigarette, gutka and pann. In both the groups beedi and snuffing powder was used in fewer number of the family members.

SECTION – II KNOWLEDGE OF ADOLESCENT SMOKERS AND NON SMOKERS REGARDING TOBACCO PRODUCTS AND ITS USE.

TABLE- III

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS & NON SMOKERS ACCORDING TO LEVEL OF OVERALL KNOWLEDGE ON USING TOBACCO PRODUCTS & ITS EFFECTS BEFORE AND AFTER INTERVENTION

N = 150

Level of Knowledge	Non smokers				Smokers			
	Before intervention		After intervention		Before intervention		After intervention	
	f	%	f	%	f	%	f	%
Good (27-40)	3	2.8	75	70.8	-	-	31	70.5
Average (14-26)	39	36.8	31	29.2	8	18.2	13	29.5
Poor (1-13)	64	60.4	-	-	36	81.8	-	-

Table – III presents distribution of adolescent smokers and non smokers in three levels of overall knowledge in relation to using tobacco products and its effects.

Before the intervention the overall knowledge regarding using tobacco products and its effects showed that majority of the samples 64 (60.4%) non smokers and 36(81.8%) smokers had poor knowledge, and rest of the samples had average knowledge.

After intervention majority of the samples 75 (70.8%) non smokers and 31 (70.5%) smokers had good knowledge and rest of the samples had average knowledge in both the groups.

Figure- 2: highlights the frequency and percentage of non smokers and smokers knowledge before intervention.

Figure –3: highlights the frequency and percentage of non smokers and smokers knowledge after intervention

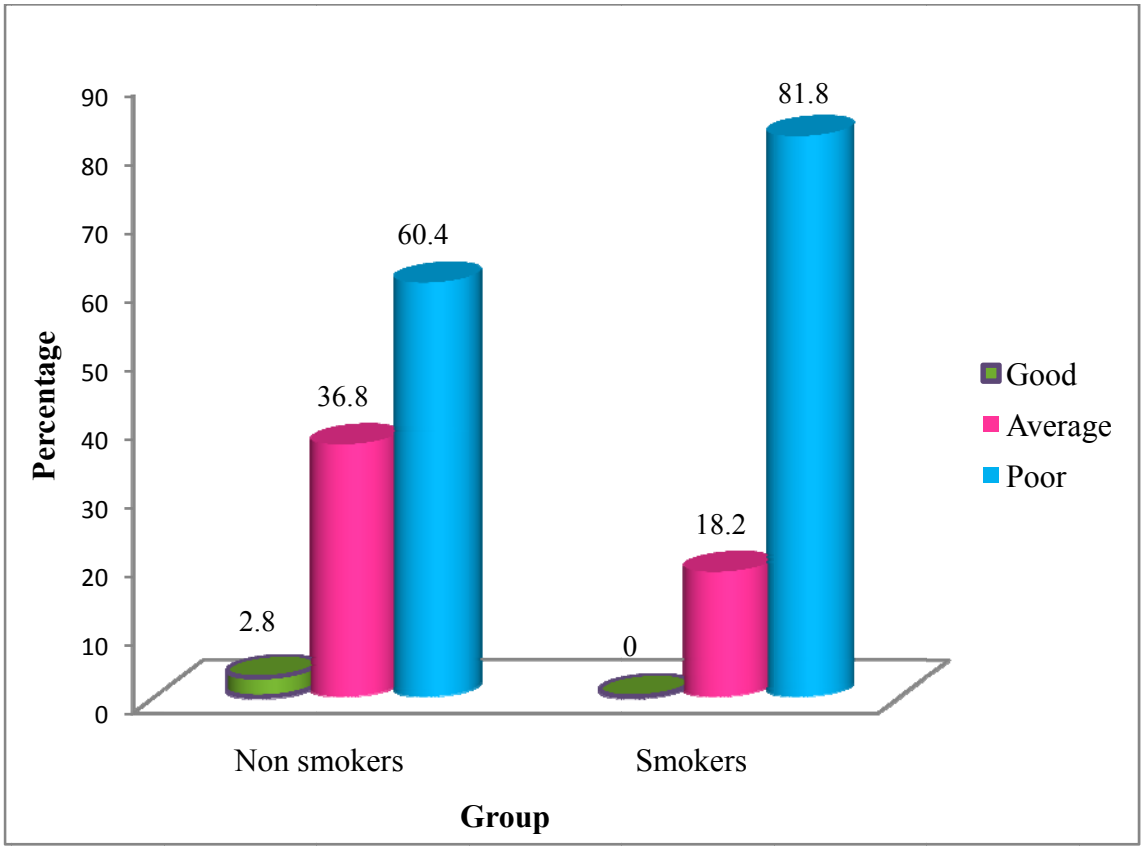


Figure – 2: Percentage of non smokers and smoker's according to overall knowledge before intervention

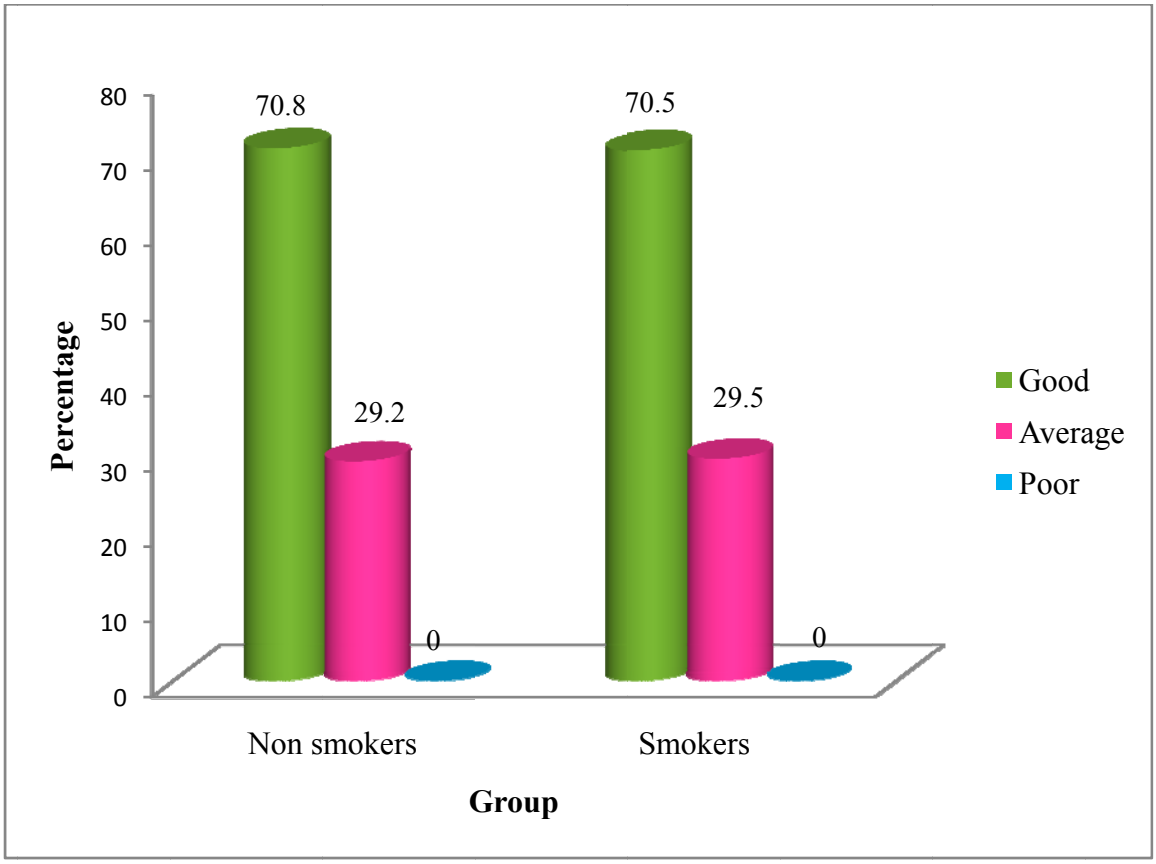


Figure –3: Percentage of non smokers and smokers according to overall knowledge after intervention

TABLE - IV

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT NON SMOKERS IN DIFFERENT ASPECTS OF KNOWLEDGE ON USING TOBACCO PRODUCTS & ITS EFFECTS BEFORE AND AFTER INTERVENTION

N= 106

S.No	Aspect of knowledge	Before intervention						After intervention					
		Good		Average		Poor		Good		Average		Poor	
		f	%	f	%	f	%	f	%	f	%	f	%
1.	Facts about tobacco products	3	2.8	50	47.2	53	50	55	51.9	51	48.1	-	-
2.	Factors influencing use of tobacco products	3	2.8	39	36.8	64	60.4	53	50.0	53	50	-	-
3.	Effects, prevention & treatment	2	1.9	39	36.8	65	61.3	70	66.0	36	34	-	-

Table IV– shows the frequency and percentage distribution of adolescent non smokers in different aspects of knowledge before and after intervention.

Among the adolescent non smokers, out of 106 samples, majority of the samples 53 – 65 subjects (50.0% - 61.3%) had poor knowledge in all the three aspects of knowledge and 2 – 3 subjects (1.9% - 2.8%) had average knowledge.

After intervention more than half 53-70 (50%-66%) of the samples had good knowledge with regard to all the three aspects of knowledge and 51 - 53 subjects (48.1% - 50.0%) had average knowledge with regard to facts about tobacco products and factors influencing use of tobacco products. 36 subjects (34.0%) had average knowledge with regard to effects, prevention and treatment.

This table concludes that exposure to the audio visual display has a marked impact on the knowledge gain of the adolescent who are non smokers.

TABLE - V

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS IN DIFFERENT ASPECTS OF KNOWLEDGE ON USING TOBACCO PRODUCTS & ITS EFFECTS BEFORE AND AFTER INTERVENTION

N = 44

S.No	Aspect of knowledge	Before intervention						After intervention					
		Good		Average		Poor		Good		Average		Poor	
		f	%	f	%	f	%	F	%	F	%	f	%
1.	Facts about tobacco products	-	-	3	6.8	41	93.2	25	56.8	19	43.2	-	-
2.	Factors influencing use of tobacco products	-	-	6	13.6	38	86.4	32	72.7	12	27.3	-	-
3.	Effects, prevention & treatment	-	-	3	6.8	41	93.2	32	72.7	12	27.3	-	-

Table V - shows the frequency and percentage distribution of adolescent smokers in different aspects of knowledge before and after intervention.

Among the adolescent smokers, out of 44 samples, 38 – 41 subjects (86.4% to 93.2%) had poor knowledge in all the three aspects of knowledge and 3 – 6 subjects (6.8% - 13.6%) had average knowledge.

After intervention 32 subjects (72.7%) had good knowledge with regard to factors influencing use of tobacco products and effects, treatment & prevention. 25 subjects (56.8%) had good knowledge with regard facts about tobacco products. The rest of the samples 12 – 19 (27.3% – 43.2%) had average knowledge in all the three aspects of knowledge.

This table concludes that exposure to the audio visual display has a marked impact on the knowledge gain of the adolescent who are smokers.

TABLE - VI

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS WITH REGARD TO OVERALL KNOWLEDGE ON USING TOBACCO PRODUCTS & ITS EFFECTS BEFORE INTERVENTION & LEVEL OF SIGNIFICANCE

N = 150

Group	Maximum score	Mean score	Mean score %	SD	Mean difference	Unpaired "t" value P<0.05 df=148
Non smokers	40	14.2	35.5	4.86	3.00	3.90 *
Smokers	40	11.2	28.0	2.57		

***- Significant** **Table value = 1.97**

Table – VI presents the mean knowledge score of smokers and non smokers regarding using tobacco products and its effects before intervention.

The non smoker's mean score of overall knowledge was 14.2 and smoker's mean score was 11.2. Statistically there was significant difference between the knowledge mean score of non smokers and smokers before intervention (t = 3.90 at df – 148, p = 0.05).So the hypothesis H_1 -"there will be significant difference between the knowledge mean score of non smokers & smokers before intervention was accepted.

This table concludes that before intervention there was significant difference in the knowledge of the adolescent non smokers & smokers.

TABLE - VII

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS &NON SMOKERS WITH REGARD TO OVERALL KNOWLEDGE ON USING TOBACCO PRODUCTS & ITS EFFECTS AFTER INTERVENTION & LEVEL OF SIGNIFICANCE

N = 150

Group	Maximum score	Mean score	Mean score %	SD	Mean difference	Unpaired "t" value P<0.05 df=148
Non smokers	40	28.1	70.3	3.18	0.30	3.86 *
Smokers	40	27.8	69.5	3.85		

***- Significant** **Table value = 1.97**

Table – VII presents the mean knowledge score of smokers and non smokers regarding using tobacco products and its effects after intervention.

After the intervention the non smoker's mean overall knowledge score was 70.3% and smokers 69.5%. Through the difference observed in the mean score of non smokers and smokers was very small. Statistically it was significant. (t = 3.86 at df =148, p= 0.05).So the hypothesis H_3 -"there will be significant difference between the knowledge mean score of non smokers & smokers after the intervention was accepted.

This table concludes that after intervention there was significant difference in the knowledge of the adolescent non smokers & smokers.

Figure – 4: highlights the mean knowledge score of smokers and non smokers before and after intervention.

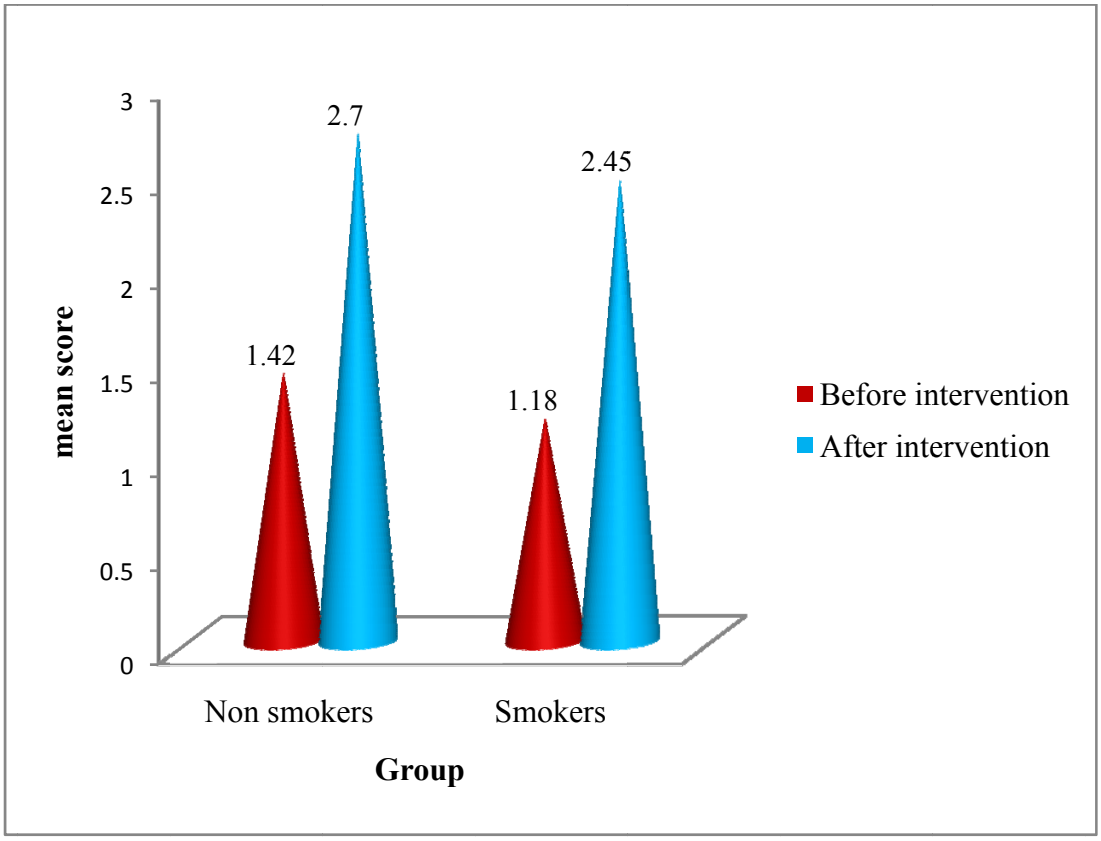


Figure – 4: Mean knowledge score of smokers and non smokers before and after intervention

TABLE – VIII

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS IN DIFFERENT ASPECTS OF KNOWLEDGE ON TOBACCO PRODUCTS & ITS USE BEFORE INTERVENTION & LEVEL OF SIGNIFICANCE.

Aspects of knowledge	Maximum score	Non smokers			Smokers			Mean difference	Un paired "t" value P<0.05 Df=148
		Mean score	Mean score %	SD	Mean score	Mean score %	SD		
Facts about tobacco products	14	5.00	35.7	1.88	2.98	21.3	1.06	2.02	6.70*
Factors influencing use of tobacco products	14	4.77	34.0	2.08	2.75	19.6	1.74	2.02	5.67*
Effects, prevention & treatment	12	4.47	37.3	1.46	3.11	25.9	1.08	1.36	5.56*

***–Significant** **Table value – 1.97**

Table – VIII presents the mean score in different aspects of knowledge regarding using tobacco products and its effects before intervention among smokers and non smokers.

Before the intervention the non smokers mean knowledge score in the aspect of facts about tobacco products was 5.00 higher than the smokers mean score 2.98. Similarly in the aspects of factors influencing use of tobacco products and effects, treatment and prevention the mean score of non smoker was higher than the smoker's mean score.

Statistically this difference was signified in all the three aspects of knowledge before intervention. This finding showed that nonsmokers seem to have better knowledge than the smokers even before the intervention.

TABLE IX

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS IN DIFFERENT ASPECTS OF KNOWLEDGE ON TOBACCO PRODUCTS & ITS USE AFTER INTERVENTION & LEVEL OF SIGNIFICANCE.

N=150

Aspects of knowledge	Maximum score	Non smokers			Smokers			Mean difference	Un paired "t" value P<0.05 Df=148
		Mean score	Mean score %	SD	Mean score	Mean score %	SD		
Facts about tobacco products	14	9.51	67.9	1.42	10.0	71.4	1.69	0.49	1.8NS
Factors influencing use of tobacco products	14	9.50	67.8	1.50	10.3	73.6	1.40	0.80	2.8S
Effects, prevention & treatment	12	9.11	75.9	1.42	9.45	78.8	1.42	0.34	1.3NS

S –Significant **NS - Non significant** **Table value – 1.97**

Table – IX presents the mean score in different aspects of knowledge regarding using tobacco products and its effects after intervention among smokers and non smokers.

After the intervention the smoker's mean knowledge score in the aspects of facts about tobacco products was 10.0, factors influencing use of tobacco products was 10.3 and effects, treatment and prevention was 9.45. The mean score was higher than the non smokers.

The mean knowledge score of non smokers in all the three aspects of knowledge was slightly low with a difference of 0.34 to 0.80 mean score. Statistically the significant difference was seen in the aspect of factors influencing using tobacco products (2.8) and there was no significant difference seen in the aspects of facts about tobacco products (1.8) and effects, treatment and prevention (1.3).

SECTION – III ATTITUDE OF ADOLESCENT SMOKERS & NON SMOKERS REGARDING TOBACCO PRODUCTS AND ITS USE.

TABLE - X

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS & NON SMOKERS ACCORDING TO LEVEL OF OVERALL ATTITUDE ON USING TOBACCO PRODUCTS & ITS EFFECTS BEFORE AND AFTER INTERVENTION

N = 150

Level of attitude	Non smokers				Smokers			
	Before intervention		After intervention		Before intervention		After intervention	
	F	%	F	%	F	%	F	%
Favourable(27-40)	-	-	75	70.8	-	-	28	63.6
Moderately favourable(14-26)	36	34.0	31	29.2	10	22.7	16	36.4
unfavourable(1-13)	70	66.0	-	-	34	77.3	-	-

Table – X presents distribution of adolescent smokers and non smokers in level of overall attitude in relation to using tobacco products and its effects.

Before the intervention in overall attitude regarding using tobacco products and its effects, in both the groups smokers and non smokers no one had good knowledge. In both the group majority of the samples non smokers 70 (66.0%) and smokers 34 (77.3%) had poor attitude and rest of the samples had average attitude.

After intervention in the both groups, majority 63.6% - 70.8% of the samples had good attitude and rest of the samples had average attitude in both the groups.

Figure – 5: highlights the frequency and percentage of non smokers and smoker's attitude before intervention**.**

Figure - 6: highlights the frequency and percentage of non smokers and smoker's attitude after intervention.

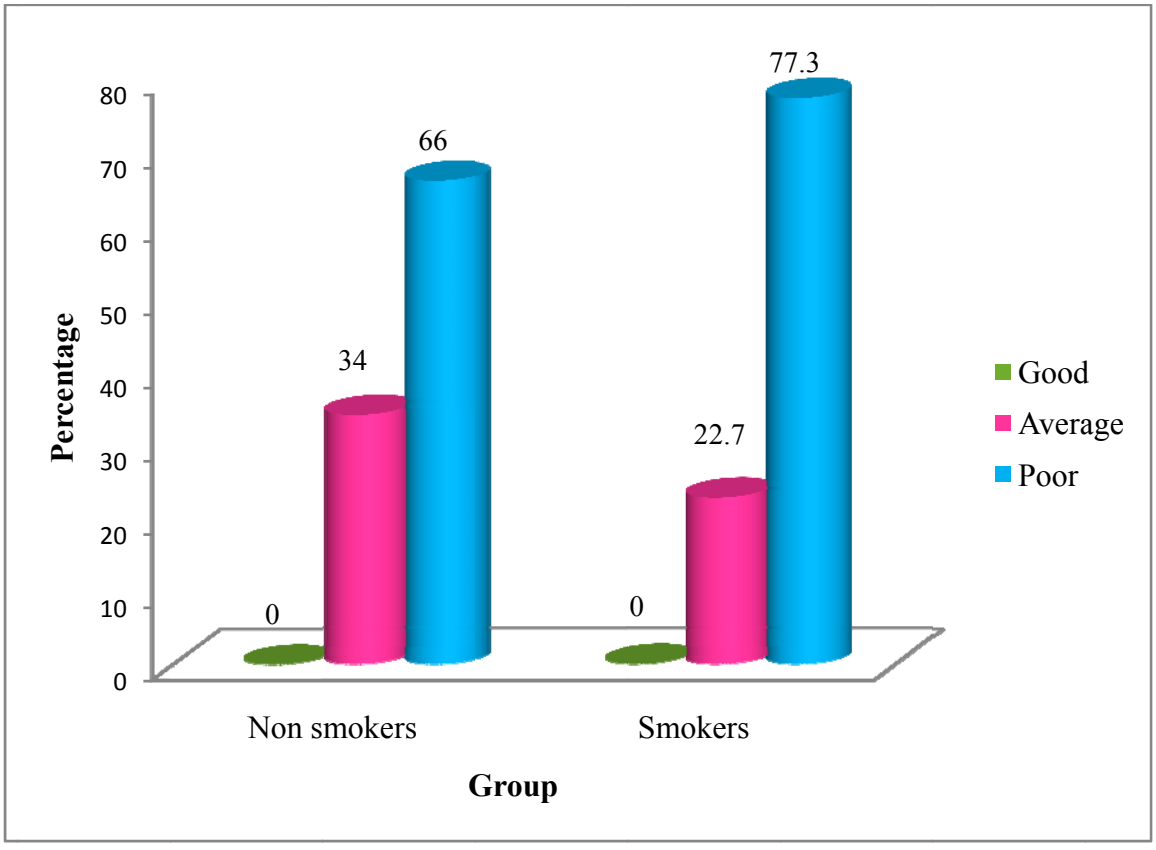


Figure – 5: Percentage of non smokers and smokers according to level of attitude before intervention.

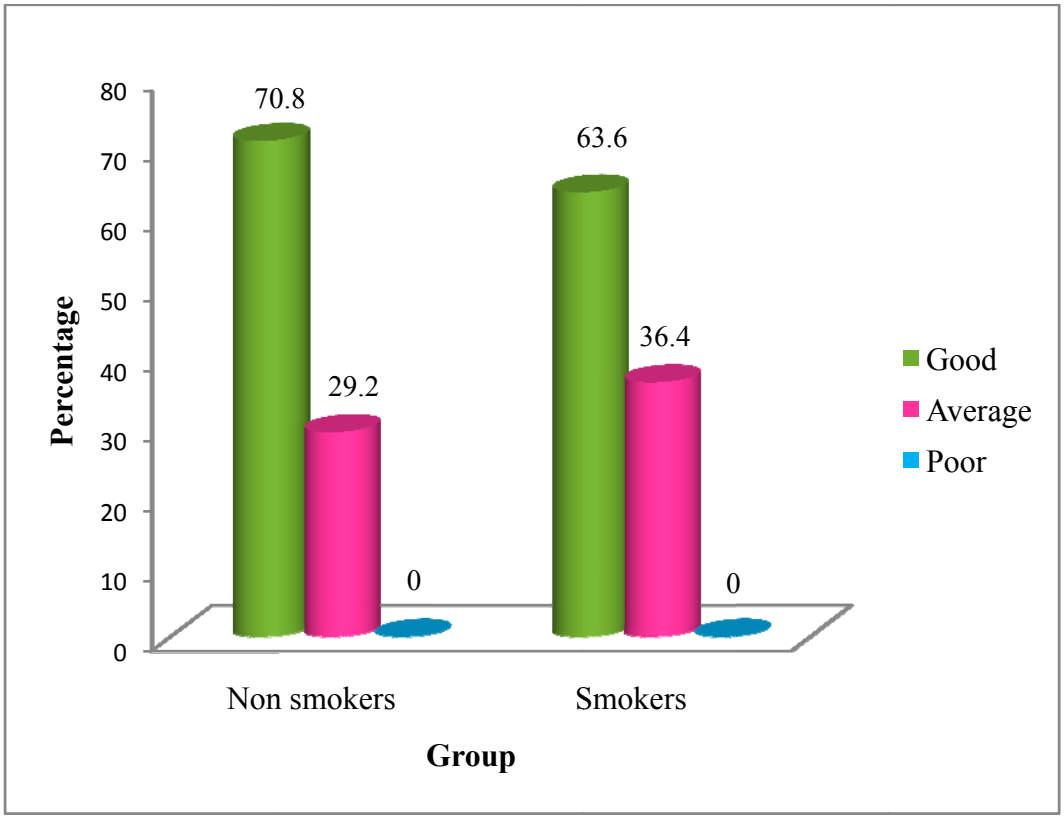


Figure - 6: Percentage of non smokers and smokers according to level of attitude after intervention.

TABLE - XI

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT NON SMOKERS IN DIFFERENT ASPECT OF ATTITUDE ON TOBACCO PRODUCTS & ITS USE BEFORE AND AFTER INTERVENTION

N = 106

S.No	Aspect of attitude	Before intervention						After intervention					
		Good		Average		Poor		Good		Average		Poor	
		f	%	f	%	f	%	f	%	f	%	f	%
1.	Smoking habits	-	-	36	34.0	70	66.0	66	62.3	40	37.7	-	-
2	Effects & prevention	-	-	37	34.9	69	65.1	61	57.5	45	42.5	-	-

Table –XI shows the frequency and percentage distribution of adolescent non smokers in different aspects of attitude before and after intervention.

Among the adolescent non smokers, out of 106 samples, 69 - 70 subjects (65.1% - 66.0%) had unfavourable attitude in both aspects of attitude and 36 - 37 subjects (34.9% - 34.0%) had moderately favourable attitude.

After the intervention more than half of the samples had favourable attitude 61 - 66 (62.3% - 57.5%) in both aspects and rest of the samples had moderately favourable attitude with regard to aspects of smoking habits and effects & prevention.

This table concludes that exposure to the audio visual display has a marked impact on changing the favourable attitude of the adolescent who are non smokers.

TABLE - XII

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ADOLESCENT SMOKERS IN DIFFERENT ASPECT OF ATTITUDE ON TOBACCO PRODUCTS & ITS USE BEFORE AND AFTER INTERVENTION

N = 44

S.No	Aspect of attitude	Before intervention						After intervention					
		Good		Average		Poor		Good		Average		Poor	
		f	%	f	%	f	%	f	%	f	%	f	%
1.	Smoking habits	-	-	14	31.8	30	68.2	27	61.4	17	38.6	-	-
2.	Effects & prevention	-	-	8	18.2	36	81.8	24	54.5	20	45.5	-	-

Table XII - shows the frequency and percentage distribution of adolescent smokers in different aspects of knowledge before and after intervention.

Among the adolescent smokers, out of 44 samples, 30 – 36 subjects (68.2% to 81.8%) had unfavourable attitude in both aspects of attitude and 8 - 14 subjects (18.2% - 31.8%) had moderately favourable attitude.

After intervention 24 -27 subjects (54.5% - 61.4) had favourable attitude with regard to smoking habits and effects & prevention. The rest of the samples 17 – 20 (38.6% – 45.5%) had moderately favourable attitude in both aspects of attitude.

This table concludes that exposure to the audio visual display has a marked impact on changing the favourable attitude of the adolescent who are smokers.

TABLE - XIII

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS OVERALL ATTITUDE ON USE OF TOBACCO PRODUCTS & ITS USE BEFORE INTERVENTION & LEVEL OF SIGNIFICANCE

N = 150

Group	Maximum score	Mean score	Mean score %	SD	Mean difference	Unpaired "t" value P<0.05 df =148
Non smokers	40	12.1	30.3	2.71	1.3	2.81*
Smokers	40	10.8	27.0	2.48		

*** - Significant** **Table value = 1.97**

Table –XIII presents the mean attitude score of smokers and non smokers regarding using tobacco products and its effects before intervention.

The non smoker's mean score of overall attitude was 12.1 and smoker's mean score was 10.8. Statistically there was significant difference between the attitude mean score of non smokers and smokers before intervention (t = 2.81 at df – 148, p = 0.05).So the hypothesis H_2-"there will be significant difference between the attitude mean score of non smokers & smokers before intervention was accepted.

This table concludes that before intervention there was significant difference in the attitude of the adolescent non smokers & smokers.

TABLE - XIV

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS OVERALL ATTITUDE ON USE OF TOBACCO PRODUCTS & ITS USE AFTER INTERVENTION & LEVEL OF SIGNIFICANCE

N = 150

Group	Maximum score	Mean score	Mean score %	SD	Mean difference	Unpaired "t"value P<0.05 df =148
Non smokers	40	28	70.0	2.95	1.0	1.67NS
Smokers	40	27	67.5	4.14		

NS – Non significant **Table value = 1.97**

Table – XIV presents the mean attitude score of smokers and non smokers regarding using tobacco products and its effects in after intervention.

After the intervention the non smoker's mean overall attitude score was 70.0% and smokers 67.5%. Through the difference observed in the mean score of non smokers and smokers was small. Statistically it was non significant. (t = 1.67 at df =148, p= 0.05).So the hypothesis H_4 -"there will be significant difference between the attitude mean score of non smokers & smokers after the intervention was rejected.

This table concludes that after intervention there was no significant difference in the attitude of the adolescent non smokers & smokers.

Figure - 7: highlights the mean attitude score of smokers and non smokers on prior and after intervention.

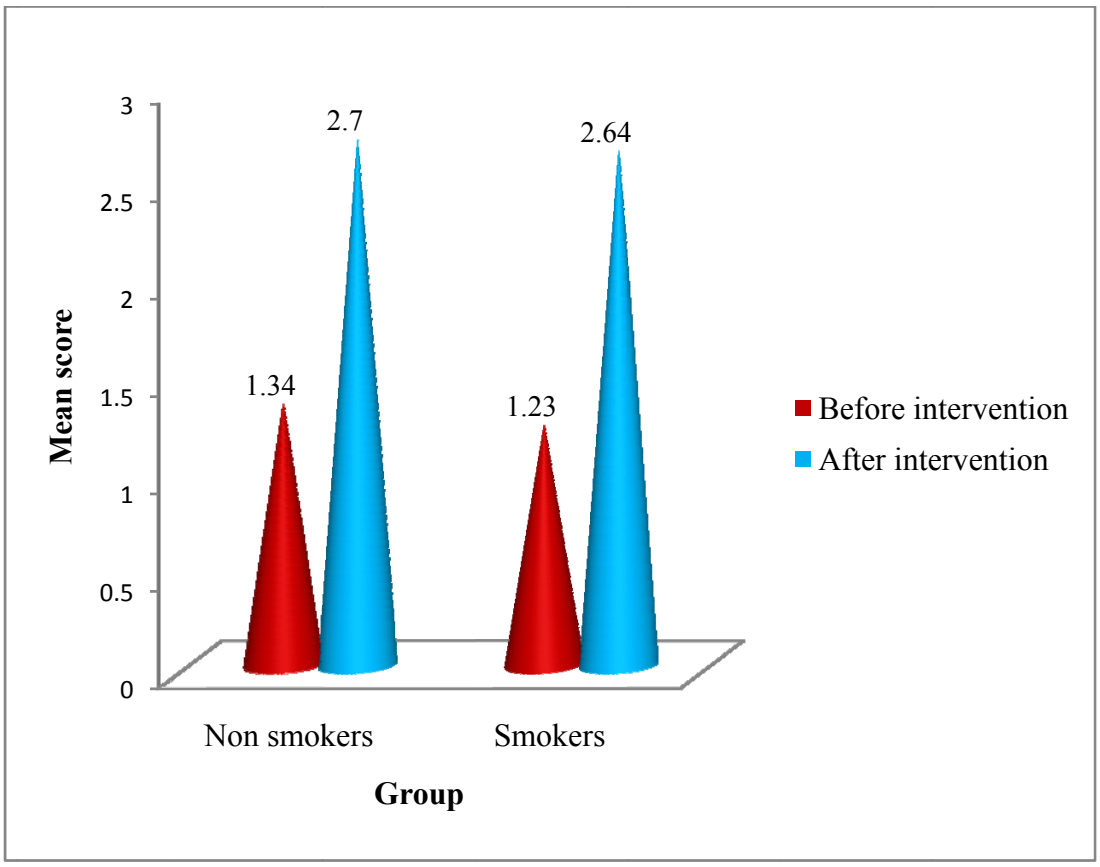


Figure - 7: Mean attitude score of smokers and non smokers prior and after intervention

TABLE –XV

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS IN THE ASPECTS OF ATTITUDE REGARDING TOBACCO PRODUCTS & ITS USE BEFORE INTERVENTION & LEVEL OF SIGNIFICANCE.

N=150

Aspects of attitude	Maximum score	Non smokers			Smokers			Mean difference	Un paired "t" value P<0.05 Df=148
		Mean score	Mean score %	SD	Mean score	Mean score %	SD		
Smoking habits	20	6.16	30.8	1.64	5.77	28.9	1.39	0.39	1.41NS
Effects & prevention	20	5.98	29.9	1.42	5.04	25.2	1.36	0.94	3.70*

S –Significant **NS - Non significant** **Table value – 1.97**

Table – XV presents the mean score of attitude in different aspects regarding using tobacco products and its ill effects in before intervention among smokers and non smokers.

Before the intervention attitude mean score in the aspects of smoking habits among non smokers (6.16) was higher than the smokers (5.77) mean score. Similarly in non smokers attitude in the aspect of effect and prevention mean score (5.98) was higher than the smokers mean score (5.04).

Statistically the significant difference was seen in the aspect of effects and prevention. In other aspects smoking habits no statistically significant difference was found.

TABLE - XVI

MEAN SCORE AND STANDARD DEVIATION OF ADOLESCENT SMOKERS & NON SMOKERS IN THE ASPECT OF ATTITUDE REGARDING TOBACCO PRODUCTS & ITS USE AFTER INTERVENTION & LEVEL OF SIGNIFICANCE.

N=150

Aspects of attitude	Maximum score	Non smokers			Smokers			Mean difference	Un paired "t" value P<0.05 Df=148
		Mean score	Mean score %	SD	Mean score	Mean score %	SD		
Smoking habits	20	14.2	71.0	1.75	13.9	69.5	2.42	0.3	0.71NS
Effects & prevention	20	13.9	69.5	1.69	13.3	66.6	2.04	0.6	1.91NS

NS - Non significant **Table value – 1.97**

Table – XVI presents the mean score of attitude in different aspects regarding using tobacco products and its ill effects in after intervention among smokers and non smokers.

After the intervention there was little variation was seen in both aspects such as smoking habits (MD – 0.3) and effects and prevention (MD - 0.6) in mean attitude score of non smokers and smokers.

Statistically there was significant difference was seen in both aspect of attitude regarding using tobacco products and its effects after intervention among smokers and non smokers.

SECTION – IV ASSOCIATION OF SELECTED DEMOGRAPHIC VARIABLES WITH OVERALL KNOWLEDGE AND ATTITUDE AFTER INTERVENTION.

TABLE - XVII

ASSOCIATION OF OVERALL KNOWLEDGE SCORE ON USING TOBACCO PRODUCTS AND ITS EFFECTS WITH SELECTED DEMOGRAPHIC VARIABLES AND LEVEL OF SIGNIFICANCE IN SMOKERS

N=44

S.No	Demographic variables	Level of knowledge				χ^2 value P<0.05	Table value
		Average		Good			
		f	%	f	%		
1	**Age**						
	a. <16	4	9.10	15	34.1	0.98	3.84
	b. >16	9	20.4	16	36.4		df=1
2.	**Family members addictive habits**						
	a. Smoking	4	9.10	7	15.9	0.16	5.99
	b.Using smokeless products	3	6.90	7	15.9		df=2
	c.Non users	6	13.6	17	38.6		

Table – XVII presents the association of selected demographic variables with overall knowledge score after intervention and the level of significance in smokers.

The table value shows that there was no association between the age (0.98) and family members addictive habits (0.16) with the overall knowledge in smokers after intervention.

TABLE - XVIII

ASSOCIATION OF OVERALL ATTITUDE SCORE ON ILL EFFECTS OF USING TOBACCO PRODUCTS WITH SELECTED DEMOGRAPHIC VARIABLES AND LEVEL OF SIGNIFICANCE IN SMOKER

N=44

S.No	Demographic variables	Level of knowledge				χ^2 value P<0.05	Table value
		Average		Good			
		f	%	f	%		
1	**Age**						
	a. <16	6	13.6	13	29.6	0.33	3.84
	b. >16	10	22.8	15	34.0		df= 1
2.	**Family members addictive habits**						
	a. Smoking	5	11.4	6	13.7		
	b.Using smokeless products	2	4.60	8	18.0	0.80	5.99 df=2
	c.Non users	9	20.5	14	31.8		

Table – XVIII presents the association of selected demographic variables with overall attitude score after intervention and the level of significance in smokers.

There was no association between age (0.33) and family members addictive habits (0.80) with the overall attitude in smokers after intervention.

TABLE – XIX

ASSOCIATION OF OVERALL KNOWLEDGE SCORE ON ILL EFFECTS OF USING TOBACCO PRODUCTS WITH SELECTED DEMOGRAPHIC VARIABLES AND LEVEL OF SIGNIFICANCE IN NON SMOKERS

N=106

S.No	Demographic variables	Level of knowledge				χ^2 value P<0.05	Table value
		poor		average			
		f	%	f	%		
1	**Age**						
	a. <16	22	20.7	48	70.0	0.47	3.84
	b. >16	9	8.50	27	36.0		df= 1
2.	**Family members addictive habits**						
	a. Smoking	6	5.67	6	5.67		
	b.Using smokeless products	6	5.67	13	12.3	3.09	5.99 df=2
	c.Non users	19	17.9	56	52.7		

Table – XIX presents the association of selected demographic variables with overall knowledge score before intervention and the level of significance in non smokers.

There was no association between age (0.47) and family members addictive habits (3.09) with the overall knowledge in non smokers after intervention.

TABLE – XX

ASSOCIATION OF OVERALL ATTITUDE SCORE ON ILL EFFECTS OF USING TOBACCO PRODUCTS WITH SELECTED DEMOGRAPHIC VARIABLES AND LEVEL OF SIGNIFICANCE IN NON SMOKERS

N=106

S.No	Demographic variables	Level of knowledge				χ^2 value P<0.05	Table value
		poor		average			
		f	%	f	%		
1	**Age**						
	a. <16	22	20.7	48	45.4	0.43	3.84
	b. >16	9	8.40	27	25.5		df = 1
2.	**Family members addictive habits**						
	a. Smoking	3	2.80	9	8.50	0.10	5.99
	b.Using smokeless products	6	5.60	13	12.2		df= 2
	c.Non users	22	20.9	53	50.0		

Table – XX presents the association of selected demographic variables with overall attitude score after intervention and the level of significance in non smokers.

There was no association between age (0.43) and family members addictive habits (0.10) with the overall attitude in non smokers after intervention.

CHAPTER – V

DISCUSSION

This study focuses on assessing the effect of audio visual display regarding ill effects of tobacco products on the awareness and attitude of adolescent boys towards using tobacco products. This chapter presents the finding and discussion.

Table – I presents the demographic characteristics of the sample.

This section deals with the demographic profile of the non smokers and smokers in relation to their age, standard, family monthly income and education of the father and mother in frequency and percentage.

With regard to family monthly income, in non smokers 37.7% had more than Rs.5000/- per month and 62.3% had less than Rs.5000/- per month. Where as in smokers 38.6% had more than Rs.5000/- per month and 61.4% had less than Rs.5000/- per month.

Similar study conducted by **A.K.Johanson** on prevalence of tobacco use showed that nearly 40% of the students from rich and middle class background consume tobacco in major cities. This shows that the family monthly income favours the use of tobacco by adolescents.

Table – II presents the use of addictive substances by family members.

In the present study, in non smokers 3.80% - 10.4% of family members used cigarette, beedi, pann, gutkha and snuffing powder. Where as in smokers 3.30% - 20.5% of family members used tobacco products.

Table – III presents distribution of adolescent smokers and non smokers in level of overall knowledge in relation to using tobacco products and its effects.

Before intervention in both the groups smokers (81.8%) and non smokers (60.4%) had poor knowledge. After intervention in the both groups, majority of the samples 75 (70.8%) non smokers and 31 (70.5%) smokers had good knowledge and rest of the samples had average knowledge in both the groups.

Table – IV presents the frequency and percentage distribution of adolescent non smokers in different aspects of knowledge before and after intervention.

Regarding the knowledge on use of tobacco products and its effects, it was classified accordingly to the level as "poor", "average", and "good". Before the intervention, the non smokers in accordance with their knowledge, in the aspect of factors influencing use of tobacco products 65 (61.3%) had poor knowledge and less amount of samples had good knowledge 3(2.9%), .Rest 39-50 (36.8% - 47.2%) of the samples had average knowledge in all the three aspects.

After the intervention more than half 53-70 (50%-66%) of the samples had good knowledge and rest of the samples had average knowledge, in all three aspects.

Table – V presents the frequency and percentage distribution of adolescent smokers in different aspects of knowledge before and after intervention.

Before the intervention majority of the samples had poor knowledge in all three aspects between 38 – 41 (86.4 % - 93.2%). The rest of the samples had average knowledge 3-6 (6.8% - 13.6%) in all three aspects

After intervention the samples showed a highest percentage 32 (72.7%) of good knowledge on both aspects such as factors influencing smoking habits and effects, treatment & prevention and 25 (56.8%) of the samples had good knowledge in the aspect of facts about tobacco products. Similar distribution of samples 12 (27.3%) had average knowledge in the aspect of factors influencing use of tobacco products and effects, treatment & prevention.

A study conducted by **Sinha.D.N.et al** on tobacco use in school adolescents showed the use of smokeless tobacco by 55.6% and smoking 19.4%. Teaching in these schools regarding harmful effects of tobacco use was non-existent. So knowledge on harmful effects of chewing tobacco and smoking were strongly associated with adolescents tobacco use.

Habits like smoking and tobacco chewing causes no ill effects immediately. So adolescents without adequate knowledge on all the aspects of addictive substances are likely to use it. In this study the adolescents had poor knowledge regarding tobacco chewing and smoking. So the chance of habit forming is more. This can be prevented only through promoting the knowledge regarding ill effects of using tobacco products.

Table – VI & **VII** presents the mean knowledge score of smokers and non smokers regarding using tobacco products and its effects before intervention.

Before intervention statistically there was significant difference between the knowledge mean score of non smokers and smokers before intervention (t = 3.90 at df – 148, p = 0.05). After the intervention the difference observed in the mean score of non smokers and smokers was statistically significant. (t = 3.86 at df =148, p= 0.05).

Table – VIII & IX presents the mean score in different aspects of knowledge regarding using tobacco products and its effects before and after intervention among smokers and non smokers.

Statistically the significant difference was seen in various aspect of knowledge regarding using tobacco products and its effects before intervention among smokers and non smokers. After intervention Statistically the significant difference was seen in the aspect of factors influencing using tobacco products (2.8) and there was no significant difference seen in the aspects of facts about tobacco products (1.8) and effects, treatment and prevention (1.3).

Table – X presents distribution of adolescent smokers and non smokers in level of overall attitude in relation to using tobacco products and its effects.

Before the intervention 69 - 70 subjects (65.1% - 66.0%) had unfavourable attitude in both aspects of attitude and 36 - 37 subjects (34.9% - 34.0%) had moderately favourable attitude.

After the intervention more than half of the samples had favourable attitude 61 - 66 (62.3% - 57.5%) in both aspects and rest of the samples had moderately favourable attitude with regard to aspects of smoking habits and effects & prevention.

A study conducted by **Farah Ahmed.et al** on Knowledge, attitude and perception of tobacco use (Shisha) among adolescents aged 14-19 years. The study result showed that attitudes on tobacco use by others were strongly associated with adolescent tobacco use. The adolescent showed a positive attitude towards tobacco use by others.

This shows that the adolescent's attitude is very important for the formation of habits regarding using tobacco products and its ill effects.

So a positive attitude towards prevention of addictive substances favours the prevention of habit formation on ill effects of using tobacco products. The chance of using tobacco products is more in those adolescents with positive attitude towards its usage.

Table –XI presents the frequency and percentage distribution of adolescent non smokers in different aspects of attitude before and after intervention.

Among the adolescent non smokers, out of 106 samples, 69 - 70 subjects (65.1% - 66.0%) had unfavourable attitude in both aspects of attitude and 36 - 37 subjects (34.9% - 34.0%) had moderately favourable attitude.

After the intervention more than half of the samples had favourable attitude 61 - 66 (62.3% - 57.5%) in both aspects and rest of the samples had moderately favourable attitude with regard to aspects of smoking habits and effects & prevention.

Table XII - presents the frequency and percentage distribution of adolescent smokers in different aspects of attitude before and after intervention.

Among the adolescent smokers, out of 44 samples, 30 – 36 subjects (68.2% to 81.8%) had unfavourable attitude in both aspects of attitude and 8 - 14 subjects (18.2% - 31.8%) had moderately favourable attitude.

After intervention 24 -27 subjects (54.5% - 61.4) had favourable attitude with regard to smoking habits and effects & prevention. The rest of the samples 17 – 20 (38.6% – 45.5%) had moderately favourable attitude in both aspects of attitude.

Table –XIII & XIV presents the mean attitude score of smokers and non smokers regarding using tobacco products and its effects before and after intervention.

The non smoker's mean score of overall attitude was 12.1 and smoker's mean score was 10.8. Statistically there was significant difference between the attitude mean score of non smokers and smokers before intervention ($t = 2.81$ at df – 148, $p = 0.05$). After the intervention the non smoker's mean overall attitude score was 70.0% and smokers 67.5%. Through the difference observed in the mean score of non smokers and smokers was small. Statistically it was non significant. ($t = 1.67$ at df =148, $p= 0.05$).

Table – XVII to XX presents the association of selected demographic variables with overall knowledge score after intervention and the level of significance in smokers and non smokers.

This table shows that that there was no association between age and family members addictive habits among smokers and non smokers after intervention.

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATION AND RECOMMENDATIONS

INTRODUCTION

In this chapter summary of the study, summary of the findings, conclusions, implications and recommendations are presented.

SUMMARY OF THE STUDY

The study was conducted to explore the effect of audio visual display regarding usage of tobacco products and its effect.

The study was done on 150 adolescent boys in a selected school, out of which 106 samples were non smokers and 44 were smokers. The conceptual framework for the present study was developed on the basis of Rosentoch's and Becker "Health belief model". The simple random sampling technique was used for selecting the samples. A structured questionnaire and attitude scale was used to explore the knowledge and attitude of adolescent boys. Content validity was done by five experts. The reliability of the tool was established by test- retest method and internal consistency was assessed using Karl Pearson's method. Data collection was done over a period of one month. The researcher gave a self- introduction and after explaining the purpose of the study and obtaining their consent the questionnaire was self- administered as pre test. Then audio visual materials were displayed for 6 days. On the 1st to 6th day the audio visual materials were displayed. On the 7th day video teaching program was conducted. On the 8th day live experience of the people was shared with the students. Then on the 22nd day, the questionnaires were administered to the 20 samples as post test. The total period of data collected was 22 days. Data analysis and interpretation was done by using a descriptive and inferential statistics. Chi square test was used to find out the association between the selected variables and level of knowledge and attitude and't' test was used to find out its significance.

SUMMARY OF FINDINGS

1. Demographic data.

Majority of the samples in non smokers 97 (91.5%) and smokers 40 (90.9%) were in the age group of 15 – 17 years. In non smokers half of the samples 50(47.2%) were in the 10^{th} standard and nearly in the 11^{th} and 12^{th} standard it was equally distributed whereas in smokers 21(47.7%) the samples were distributed in 11^{th} and 12^{th} standard. Nearly 62.3% of non smokers and 61.4% of smokers had a family monthly income of more than Rs.5000/ month. The parents of 40% - 56.8% of samples had secondary education in both the groups.

Regarding the use of tobacco products by family members in non smokers 3.80% - 10.4% of them used cigarette, beedi, pann, gutkha and snuffing powder. Where as in smokers 3.30% - 20.5% of the family members used tobacco products.

2. Knowledge of adolescents on using tobacco products and its effects

The three aspects of knowledge assessed were good, average and poor. Before the intervention in overall knowledge, majority of the samples 64 (60.4%) non smokers and 36(81.8%) smokers had poor knowledge, and rest of the samples had average knowledge. After intervention in the both groups, majority of the samples 75 (70.8%) non smokers and 31 (70.5%) smokers had good knowledge and rest of the samples had average knowledge in both the groups.

3. Attitude of adolescents towards using tobacco products and its effects

The three aspects of attitude assessed were favourable, moderately favourable and unfavourable. Before the intervention, considering the overall attitude regarding using tobacco products and its effects, none of the smokers and non smokers had good knowledge. Majority of the samples in non smokers 70 (66.0%) and smokers 34 (77.3%) had poor attitude and rest of the samples had average attitude. After intervention in the both groups, majority 63.6% - 70.8% of the samples had good attitude and rest of the samples had average attitude in both the groups.

4. Significant findings

Statistically there was significant difference between the knowledge mean score of non smokers and smokers before intervention (t = 3.90 at df – 148, p = 0.05). Hence the research hypothesis H_1 was accepted at 0.05 level of significance.

After the intervention the non smoker's mean overall knowledge score was 70.3% and smokers 69.5%. Through the difference observed in the mean score of non smokers and smokers was very small. Statistically it was significant. (t = 3.86 at df =148, p= 0.05). Hence the research hypothesis H_3 was accepted at 0.05 level of significance.

The non smoker's mean score of overall attitude was 12.1 and smoker's mean score was 10.8. Statistically there was significant difference between the attitude mean score of non smokers and smokers before intervention (t = 2.81 at df – 148, p = 0.05). Hence the research hypothesis H_2 was accepted at 0.05 level of significance.

After the intervention the non smoker's mean overall attitude score was 70.0% and smokers 67.5%. Through the difference observed in the mean score of non smokers and smokers was small. Statistically it was non significant. (t = 1.67 at df =148, p= 0.05).

CONCLUSION

The findings of the study concluded that the audio visual display on tobacco products which portrayed the ill effects on health have played a dramatic role to made an impact on knowledge and attitude among smokers and non smokers. Therefore, it is evident that the adolescents have acquired good knowledge and favorable attitude by means of the health teaching through audio visual material.

IMPLICATION

In order to reduce the mortality and morbidity related to the use of tobacco products, preventive measures are to be emphasized. There is a need for the health personnel to take active part in primary prevention of diseases.

The findings of the study have implications in various fields of nursing.

Nursing practice

Nursing professionals can make significant contribution to health promotion among adolescents and their families. Nurses understand the biologic, cognitive, psychological and social transitions of adolescence and their impact on health behaviour.

Hence they can address the development and health needs of adolescents. The nurses can render awareness through education at the community level, and also improve the knowledge of parents through different educational strategies. The need for educational programmes through media should be emphasized and conducted. School health programmes has to be made mandatory in nursing practice. A safe and supportive environment should be provided to an adolescent along with mandatory health education. An adequate coping strategy has to be inculcated in every student. Timely guidance and counseling services should be arranged. When provided with adequate knowledge, positive support and love, the adolescents can become most useful, resourceful and contributing members of society.

Nursing education

Nursing education emphasizes that health care system should pay more attention to training the nursing students so that the nurses will become knowledgeable and can be of help to their own selves as well as to others by imparting health education regarding using tobacco products and its effects by various methods of educational technology.

Nursing administration

Nursing administrator should be necessarily involved in formulating policies for health education programmes in the schools, hospital setting as well as community. The need for health education regarding using tobacco products and its effects should be recommended to all the nurses. All the health education strategies should be regularly evaluated and the required modifications should be made for fulfilling the objectives of care

RECOMMENDATIONS

1. The study can be replicated on using various audio visual aids, in different schools.
2. A comparative study between urban and rural children on knowledge and attitude regarding using tobacco products and its effects.
3. A study can be conducted with structured teaching programme on knowledge regarding ill effects of using tobacco products.

REFERENCES

BOOKS

1. Bhonsle R.B., Murti.P.R, and Gupta P.C., (1992) "Tobacco habits in India, in Control of Tobacco related Cancers and other diseases", Oxford University Press, Bombay,Pp: 25-46.
2. Edelman Carole Lum (2002), "Health Promotion Throughout the Life Span", 6th edition, Mosby publications, Pp: 502 – 523.
3. Gupta Piyush, O.P. Ghai (2007), "Text Book of Preventive and Social Medicine", 2nd edition CBS publishers, Pp: 666-671.
4. Behrman Richard .E. Blugman Robert. M. Jonson Hal. B. (2004), "Text Book of Pediatrics", 7th edition W.B. Saunders Company, Pp: 688-689.
5. Jha P, Chaloupka FJ (2000) "Tobacco Control in Developing Countries", New York; Oxford University Press, World Bank, Pp: 501 – 511.
6. Stanhope Marcia, Lancaster Jeanette (1992), "Community Health Nursing", 3rd edition, Mosby publications, Pp: 392,398.
7. Saxena S, Pal HR, Ambedkar (2003) " Alcohol and Drug Abuse", New Delhi, New Age International (P) Limited , Pp : 621 – 633
8. Iorfark and Arneil's (1992), "Text Book of Pediatrics", 4th edition, ELBS, Pp: 1837
9. Lissaues Tom, Ekayden Graham (2001), "Text book of Pediatrics", 2nd edition, Mosby publications, Pp: 76,99,105,227,1229.

JOURNALS

1. Arora Monica (2003), "The tobacco journey: seeds of a menace", Health for the Millions, Vol – 29, No: 2 Pp: 4-6.
2. Chander S.J (2004), "Tobacco consumption in India and its consequences", Health Action, Pp: 20-21.
3. Arya Ramesh Chandra (2003), "Smoking and child health", Herald of Health, Vol – 94, No: 8 Pp: 18-19.

4. Christine G (2003), "Why it is hard to quit smoking", Herald of Health, Vol – 94, No: 8 Pp : 18- 19.
5. John Shoba (2003), "Framework convention on tobacco control: the first global public health treaty", Health for the Millions, Vol -29, No: 2 Pp: 59 - 62.
6. Karba Kamala Narayan (2003), "Tobacco menace: the Indian context", Health for the Millions, Vol – 29, No: 2 Pp: 52 – 54.
7. Kapasi Neetu (2004), "Overview of adolescent life", Health for the Millions, Vol – 27, No: 2 Pp: 7- 18.
8. Kenny Craig (2006), "Smoking addiction and its ill effects", Nursing Times Vol – 102, No: 41, Pp10.
9. Mackay Judith, Micheal E rickson (2003), "The tobacco atlas", Health for the Millions, Vol – 29, No: 2, Pp: 74 – 77.
10. Mishra Bejon (2003), "Consumer rights and tobacco", Health for the Millions, Vol – 29, No: 2, Pp: 63 – 67.
11. Pendharkar D (2003), "Tobacco: games the industry play", Health for the Millions, Vol – 29, No: 2, Pp: 55-58.
12. Kumar Ananth (2005), "Adolescent health and problem associated with smoking habits", Health Action, Pp: 25 – 27.
13. Ramachandran S (2006) "Smoking in adolescence", Nightingale Nursing Times, Vol –2, Issue – 1 Pp: 52 – 54.
14. Reddy K, Srikanth (2003), "Tobacco control also needs action on the supply Side", Health for the Millions, Vol – 29, No: 2, Pp: 26 – 28.
15. Roy Taposh (2003), "Long and winding road tobacco control", Health for the Millions, Vol – 29, No: 2, Pp: 39 - 46.
16. Saini Radha, Thakur Neelam (2007), "Health problems of adolescents", Health Action, Pp: 26 – 30.
17. Sinha D.N (2003), "Exposures versus targeting youth in the North and East of Asia", Health for the Millions, Vol – 29, No: 2, Pp: 15 – 21.
18. Tandon R. (2003), "Nicotine abuse", Health for the Millions, Vol – 29, No: 2, Pp: 47– 51.

19. Toran Kalpana (2007), "Health adolescents for a wealthy nation", Health Action, Pp: 31-35.
20. Varghese.C and Nambiar .B (2003), "Tobacco Cancer", Health for the Millions, Vol – 29, No: 2, Pp: 7 – 14.

WEBSITES

1. http://www.bioline.org.br/request?cn06020
2. http://www.censusindia.net
3. http://www.edu.gov/tobacco/global/GSPS.htm
4. http://www.indiancommodity.com/gen/tobacco.html
5. www.thecommunityguide.org/tobacco/tobac.pdf

APPENDIX – I

LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY

To

The Headmaster
Government Boys Higher Secondary School,
Sulur
Coimbatore,

Respected Sir / Madam,

Sub: Letter requesting permission for conducting the study.

Ms.A.Arockia viji is a post graduate nursing student of our institution. She has selected the below mentioned topic for her research project to be submitted to Dr.MGR Medical University of Health Science as a partial fulfillment of Master Nursing degree.

"A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore".

Regarding this project, she is in need of your esteemed help and co-operation as she is interested in conducting a study of her project, in your institution. I request you to kindly permit her to conduct the proposed study and provide her the necessary facilities.

The student will furnish further details of the study if required personally. Please do the needful and oblige.

Thanking You

Yours Faithfully,

Place: PRINCIPAL

Date:

APPENDIX – II

PERMISSION LETTER FOR CONTENT VALIDITY

From

Ms.A.Arockia viji

M.Sc (N) II Year

R.V.S College of Nursing,

Sulur, Coimbatore.

To

Through the Principal

Respected Madam / Sir

Sub: Request for opinions and suggestions of experts for establishing content validity of research tool.

I am a Master of Nursing student in RVS College of Nursing, Sulur in the Specialty of community health nursing. As per the requirement for the partial fulfillment of the Master of Nursing degree under the Tamil Nadu Dr.MGR Medical University, I have selected the following topic for dissertation.

"A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore".

I humbly request you to kindly validate the tool and give your valuable suggestion.

Thanking You

Yours sincerely

Ms.A.Arockia viji.

Enclosures:
1. Statement of the problem
2. Objectives of the study
3. Research tool
4. Criteria rating for validation
5. Content validation certificate.

APPENDIX – III

CERTIFICATE OF CONTENT VALIDITY

This is to certify that tool developed by Ms.A.Arockia viji, M.Sc Nursing II year student, R.V.S. College of Nursing, Sulur, Coimbatore to collect data on the problem **"A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore"** is validated by the undersigned and she can proceed with this tool to conduct the main study.

Name and Address :

Signature :

Seal :

Date :

LIST OF EXPERTS

Medical expert

Dr. U.M.Natarajan M.B.B.S.M.D., ----------

Professor (Retd) CMCH, Coimbatore,

Consultant General Physician / Diabetologist/ Cardiologist

R.V.S. Hospital, Coimbatore.

Population research expert

Dr. Dhanabaghyam, ----------

Asst Chief,

Population Research Centre,

The Gandhigram Institute of Rural Health & Family Welfare Trust,

Gandhigram, Dindigul (Dist).

Nursing Experts

1. **Mrs.Janey Kemp, M.Sc (N)** ----------

   Principal,

   Institute of Nursing,

   G.K.N.M. Hospital

   Coimbatore.

2. **Mrs.Saramma Samuel, M.Sc (N)** ----------

   Principal,

   R.V.S College of Nursing,

   Sulur, Coimbatore.

3. **Mrs.Alageswari, M.Sc (N), DPHN** ----------

   Public Health Nursing Officer,

   Regional Health Teacher Training Institute,

   The Gandhigram Institute of Rural Health & Family Welfare Trust,

   Gandhigram, Dindigul (Dist).

APPENDIX – IV

CRITERIA RATING SCALE FOR VALIDATING THE QUESTIONNAIRE AND ATTITUDE SCALE ON USING TOBACCO PRODUCTS AND ITS ILL EFFETS.

Kindly go through this tool, please give your views regarding clarity, relevancy, adequacy and remarks.

S.No	Item	Clarity	Relevancy	Adequacy	Remarks
1	**PART – 1** **Demographic data**				
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
2	**PART – II** **Questionnaire** **Facts about tobacco products**				
	1				
	2				
	3				

S.No	Item	Clarity	Relevancy	Adequacy	Remarks
	4				
	5				
	6				
	7				
	8				
	Factors influencing using tobacco products				
	9				
	10				
	11				
	12				
	13				
	Effects ,prevention and treatment				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				

S.No	Item	Clarity	Relevancy	Adequacy	Remarks
	25				
3	**PART – III** **Attitude scale**				
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

Suggestions……

Signature of the validator

APPENDIX – V

REQUISITION LETTER FOR CO-GUIDE

To

Dr. U.M.Natarajan M.B.B.S.M.D.,
Professor (Retd) CMCH, Coimbatore,
Consultant General Physician / Diabetologist/ Cardiologist
R.V.S. Hospital, Coimbatore.

Through the principal

Respected Sir,

Sub: Request for Co-Guide

Ms.A.Arockia viji is a post graduate nursing student of our institution. She has selected the below mentioned topic for her research project to be submitted to Dr.MGR Medical University of Health Science as a partial fulfillment of Master Nursing degree.

"A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore"

Regarding this project, she is in need of your esteemed help and co-operation as she is interested in conducting a study of her project. Please do the needful and oblige.

Thanking You

Yours Faithfully,

Place:
Date: Principal

APPENDIX – VI

QUESTIONNAIRE

INTRODUCTION:

Using tobacco products (in different forms) and smoking is very common among people. The habit of using tobacco products is on the increase among school children. Regardless of whether a person uses the tobacco products or not each one will have their own views and reasons with regard to this habit.

PURPOSE:

The purpose of this questionnaire is to find out how much you about tobacco products and it effect on the person and what is your opinion regarding the use of tobacco products.

INSTRUCTION:

1. Kindly go through each question and answer it by placing a tick mark (√) in the appropriate box.
2. Each question can have one or more correct answer.
3. Do not leave any question unanswered.
4. Your answer will be kept confidential.

PART I

DEMOGRAPHIC DATA

1. What is your age?
   a) 15 yrs ☐
   b) 16 yrs ☐
   c) 17 yrs ☐
   d) 18 yrs ☐
2. In which standard are you studying?
   a) 10^{th} std ☐
   b) 11^{th} std ☐
   c) 12^{th} std ☐

3. What is your Family monthly income?

a) Rs.<1000 ☐
b) Rs.1001 - Rs.3000 ☐
c) Rs.3001 – Rs.5000 ☐
d) Rs.> 5000 ☐

4. Education of

	Father	Mother
a) Illiterate	☐	☐
b) Primary education	☐	☐
c) Secondary education	☐	☐
d) graduate	☐	☐

5. Occupational status of parent's

	Father	Mother
a) unemployed	☐	☐
b) Daily wage labor	☐	☐
c) Industrial worker	☐	☐
d) Professional employee	☐	☐
e) government employee	☐	☐

6 Do you have any of the following habits?

a) Smoking ☐
b) Using tobacco products ☐
(Pann, gutkha, snuffing powder)
c) Nil ☐

7. If yes, how frequently do you have them?

a) Once in daily ☐
b) Twice in daily ☐
c) More than twice per day ☐
d) Once in a while ☐

8. If yes, at what age did you begin using tobacco products?

a) 10 - 12 years ☐

b) 13 - 15 years ☐

c) 16 - 18 years ☐

9. Who introduced you to these habits?

a) Friend ☐

b) Family members ☐

c) Influence of media ☐

d) Any other, specify ☐

10. Does your family members use any of the following?

a) cigarette ☐

b) Cigar ☐

c) Gutkha ☐

d) Pann ☐

e) Snuffing powder ☐

PART – II

KNOWLEDGE QUESTIONNAIRE ON USING TOBACCO PRODUCTS & ITS ILL EFFECTS

Kindly go through each question and give your answers by ticking (√) in the Appropriate box.

A) FACTS ABOUT TOBACCO PRODUCTS

1. Commonly available tobacco products

   a) Paan ☐
   b) Cigar ☐
   c) Cigarette ☐
   d) Beedi ☐
   e) Gutkha ☐
   f) Any other, specify ☐

2. What is used to make cigarettes?

   a) Betel Leaves ☐
   b) Tobacco Leaves ☐
   c) Mint Leaves ☐

3. What does contain cigarette?

   a) Nicotine ☐
   b) Caffeine ☐
   c) Cocaine ☐
   d) Tannin ☐
   e) Don't know ☐

4. What kind of harmful gas is present in cigarette?

   a) Carbon Monoxide ☐
   b) Carbon dioxide ☐
   c) Sulphur dioxide ☐
   d) Nitrogen dioxide ☐

5. What is the most common form of tobacco use?

a) Chewing tobacco ☐
b) Snuffing tobacco ☐
c) Smoking tobacco ☐

6. The major addictive element in smokeless tobacco is?

a) Nicotine ☐
b) Sugar ☐
c) Caffeine ☐
d) Cocaine ☐

7. From where do people get the chewable items (pann, gutkha)?

a) Store ☐
b) Petty shop ☐
c) Market ☐
d) Street vendor ☐

8. When a person smokes does it cause harm to others sitting around him?

a) Yes ☐
b) No ☐
c) Don't know ☐

B) FACTORS INFLUENCING SMOKING HABITS

9. Generally at what age does an individual start smoking habit?

a) 13 – 19 yrs ☐
b) 20 – 29 yrs ☐
c) 30 – 39 yrs ☐
d) 40 yrs and older ☐

9. People chew items such as paan & gutkha

a) For pleasure ☐
b) For digestion ☐
c) To prevent bad smell ☐
d) For good tast ☐

11. Chewing tobacco is preferred to cigarette smoking

a) To avoid public punishment ☐

b) Ease to use ☐

c) Easily available ☐

d) Smokeless ☐

12. One start chewing paan (or) gutkha?

a) Out of curiosity ☐

b) To know the taste ☐

c) To imitate the heroes ☐

d) To develop friendship ☐

13. What activities do you associate with smoking?

a) For getting up early ☐

b) Playing ☐

c) For getting sleep ☐

d) Partying ☐

C) EFFECTS, PREVENTION & TREATMENT

14. The cigarette smoke breathed by another person is called.

a) Active smoking ☐

b) Passive smoking ☐

c) Chain smoking ☐

d) Chronic smoking ☐

15. What is the most common problem caused by chronic smoking?

a) Lung cancer ☐

b) Stomach cancer ☐

c) Renal failure ☐

d) Diarrhea ☐

16. One of the warning signs for oral cancer is:

a) White or red patch on your tongue ☐

b) Fatigue ☐

c) Coughing ☐

d) Numb or burning fingers ☐

17. Pregnant women who get exposed to passive smoking have an increased risk of

a) Child being born overweight ☐

b) Miscarriage ☐

c) Child being born with eye infection ☐

d) Child being born with respiratory problem ☐

18. Smoking robs the body affecting the function of …….

a) Vitamin A ☐

b) Vitamin C ☐

c) Vitamin E ☐

d) Vitamin D ☐

19. Identify the "anti smoking'' symbol which is shown in the cigarette pocket

a)  ☐

b)  ☐

c)  ☐

d)  ☐

20. Which of the following is considered as most successful smoking cessation method?

a) Chewing gum ☐

b) Counseling & Medications ☐

c) Prayer ☐

d) Meditation ☐

21. What is the slogan written on cigarette packet?

a) Smoking affects the health ☐

b) Smoking is injurious to health ☐

c) Smoking is not injurious to health ☐

d) Smoking rarely affects the health ☐

22. Which of the following oral problem can occur because of tobacco use?

a) Vomiting. ☐

b) Dental carries ☐

c) Stained teeth & bad odour ☐

d) Bleeding gum ☐

23. Continued use of smokeless tobacco products can cause

a) Arthritis ☐

b) Oral cancer ☐

c) Brain damage ☐

d) Chipped teeth ☐

24. Does your school have policies or practices related to tobacco use?

a) Yes ☐

b) No ☐

c) Don't know ☐

25. What are the actions taken by the government against use of tobacco?

a) Smoking in the public is banned ☐

b) Selling gutkha in the shops is banned ☐

c) Smoking is punishable by law ☐

PART – III

ATTITUDE SCALE

Given below are some of the beliefs and views of people with regard to use of tobacco products and its ill effects. What is your view with regard to these statements. Kindly indicate your views in one of the 3 columns provided (agree, not sure, disagree)

INSTRUCTION:

1. Tick (√) only in one column against each statement
2. Do not leave out any item.
3. There is no right and wrong answers

S.NO	STATEMENT	AGREE	NOT SURE	DIS AGREE
1	Smoking is injurious to health			
2	Chewing tobacco is harmless compared to smoking			
3	It is better to avoid all tobacco products			
4	Use of tobacco products / smoking will improve the status among peer group.			
5	Smoking reduces the smokers life span			
6	Using tobacco products 2 -3 times per day do not cause any health problems			
7	Smoking makes the person less attractive.			
8	It is difficult to stop smoking once it is started			

S.NO	STATEMENT	AGREE	NOT SURE	DIS AGREE
9	Addiction to tobacco products increase the urge to smoke			
10	Raising tax on cigarette will reduce the incidence of smoking			
11	Breathing second hand smoke is harmless			
12	Using pann & gutkha helps to improve concentration			
13	Smoking help people feel more comfortable at parties and in social situation			
14	Strict law should be enforced to punish those who smoke in public places			
15	Some chronic smokers do not have any health problem			
16	Non smokers may also suffer from lung cancer			
17	People smoke to show that they are adult			
18	Some smoke to attract girls			
19	Young people who smoke cigarette have more friends			
20	It is difficult to refuse if someone offers cigarette			

fUj;Jf;fzpg;G

Kd;Diu

Gifapiyiag; gad;gLj;JtJ kw;Wk; Gifg;gJ ek; kf;fspilNa rhjhuzkhff; fhzg;gLfpwJ. gs;spnry;Yk; Foe;ijfsplk; Gifapiyg; nghUl;fisg; gad;gLj;Jk; gof;fk; cah;e;J nfhz;bUf;fpwJ. xUtH Gifg;gth; vd;whYk;> Giff;fhjth; vd;whYk;> xt;nthUtUf;Fk; mgpg;gpuhak; kw;Wk; mg;gof;fj;jpw;fhd fhuzk; ,Uf;Fk;.

Nehf;fk;

,e;jf; fUj;Jf; fzpg;gpd; Nehf;fk; ePq;fs; Gifapiyg; nghUl;fisg; gw;wp ve;j msTf;Fj; njhpe;J itj;J ,Uf;fpwPHfs;> xU egiu ve;j msT mJ ghjpf;fpwJ> kw;Wk; Gifapiyg; nghUl;fisg; gw;wpa cq;fs; fUj;Jf;fs; Nghd;wtw;iw mwpe;J nfhs;s.

jaT nra;J fPNo cs;s Fwpg;GfSf;F rhpahd gjpiy vjpNu cs;s fl;lj;jpy; (✔) Fwpapl;Lj; NjHe;njLf;fTk;.

gFjp - I

Gs;sptptu Ma;tpw;Fj; Njitg;gLk; jfty;fs; :

1. taJ

m) 15 taJ ☐

M) 16 taJ ☐

,) 17 taJ ☐

<) 18 taJ ☐

2. fy;tpepiy

m) 10k; epiy ☐

M) 11k; epiy ☐

,) 12k; epiy ☐

3. FLk;g khj tUkhdk;

m) &1000f;Fk; FiwT ☐

M) &1001f;Fs; - &.3000 tiu ☐

,) &.3001f;Fs; - &.5000 tiu ☐

<) &.5000f;F Nky; ☐

4. fy;tpj; jFjp mg;gh mk;kh

m) gbg;gwptpy;yhjth; ☐ ☐

M) njhlf;ff; fy;tp fw;wth; ☐ ☐

,) cah;fy;tp fw;wth; ☐ ☐

<) gl;lg;gbg;G gbj;jth; ☐ ☐

5. njhopy; mg;gh mk;kh

m) Ntiy ,y;yhjth; ☐ ☐

M) $yp Ntiy nra;gth; ☐ ☐

,) njhopw;rhiyapy; gzpGhpgtH ☐ ☐

<) Ra njhopy; nra;gtH ☐ ☐

c) muR CopaH ☐ ☐

6. fPo;f;fz;ltw;wpy; cq;fSf;F VNjDk; cgNahfpf;Fk; gof;fk; cz;lh?

m) Gifg;gpbj;jy; ☐

M) Gifapiy nghUl;fis gad;gLj;Jjy; ☐

(ghd;> Fl;fh> %f;Fg;nghb> ghf;F) ☐

,) ,y;iy

7. cz;L vdpy;> vj;jid Kiw gad;gLj;JtPh;fs;?

m) xU ehspy; xU Kiw ☐

M) xU ehspy; ,uz;L Kiw ☐

,) xU ehspy; ,uz;Lf;F Nky; ☐

<) vg;NghjhtJ ☐

8. ve;j tajpy; Gifg; nghUl;fis gad;gLj;j Muk;gpj;jPh;fs;?

m) 10 Kjy; - 12 tajpw;Fs; ☐

M) 13 Kjy; - 15 tajpw;Fs; ☐

,) 16 Kjy; - 18 tajpw;Fs; ☐

9. cq;fis Gifapiyg; nghUl;fis gad;gLj;j Kd;Ndhbahf ,Ue;jJ ahh;?

m) ez;gd; ☐

M) FLk;gj;jpy; cs;sth;fs; ☐

,) jpiug;gl tpsk;guq;fs; ☐

<) ,it jtpu> NtW VjhtJ ☐

10. fPo;f;fz;ltw;wpy; vtw;iwahtJ cq;fs; FLk;gj;jpy; cs;sth;fs; gad;gLj;Jfpwhh;fsh?

m) rpfnul; ☐

M) rpfhh; ☐

,) Fl;fh ☐

<) ghf;F ☐

c) %f;Fg;nghb ☐

gFjp - 2

Gifapiyg; nghUl;fisg; gad;gLj;Jtjhy; Vw;gLk; jPikfs; gw;wpa fUj;Jf;fzpg;G:

Kd;Diu

jaT nra;J fPNo cs;s tpdhf;fSf;F cq;fSf;F njhpe;j tpilia (✔)

FwpaPl;bd; %yk; Njh;T nra;f:-

Gifapiyg; nghUl;fs; gw;wpa fUj;Jfs;:

1. nghJthf cgNahfpf;fg;gLk; Gifapiyapd; tiffs;?

m) ghd; ☐

M) rpfhh; ☐

,) rpfnul; ☐

<) gPb ☐

c) Fl;fh ☐

C) ,itjtpu> NtW VjhtJ ☐

2. rpfnul; jahhpf;fj; Njitg;gLk; nghUs;?

m) ntw;wpiy ☐

M) Gifapiy ☐

,) Gjpdh ,iy ☐

3. rpfnul;by; vt;tif er;Rg; nghUs; cs;sJ?

m) epf;Nfhl;bd; ☐

M) fh/gpd; ☐

,) nfhifd; ☐

<) lhdpd; ☐

c) njhpatpy;iy ☐

4. rpfnul;by; cs;s kpf er;Rj;jd;ik tha;e;j thA vJ?

m) fhh;gd; Nkhdhf;irL ☐

M) fhh;gd; il Mf;i]L ☐

,) ry;gh; il Mf;i]L ☐

<) iel;u[d; Mf;irL ☐

5. Gifapiyapd; ve;j tif kpf gutyhf gad;gLj;jg;gLfpwJ?

m) Gifapiyia nky;Yjy; ☐

M) %f;Fg;nghb Kiw ☐

,) Giff;Fk; Kiw ☐

6. Gifapy;yhg; Gifapiy gof;fj;jpy; mjpf mstpy; mbikg;gLj;Jk;

nghUs; vd;d?

m) epf;Nfhl;bd; ☐

M) rh;f;fiu ☐

,) fh/gpd;

<) nfhifd; ☐

7. kf;fs; Gifapiy> kw;Wk; ghf;F tiffis vq;fpUe;J ngWfpd;wdh;?

m) mq;fhb ☐

M) ngl;bf;fil ☐

,) khh;f;nfl; ☐

<) njUtpy; tpw;ghplk;; ☐

8. xUtd; Giff;Fk;NghJ mtid Rw;wp cs;sth;fis Gif ghjpf;Fkh?

m) Mkhk; ☐

M) ,y;iy ☐

,) njhpatpy;iy ☐

9. nghJthf xU kdpjd; ve;j tajpy; Gifgpbf;Fk; gof;fj;ij Muk;gpf;fpwhd;?

m) 13 Kjy; - 19 tajpw;Fs; ☐

M) 20 Kjy; - 29 tajpw;Fs; ☐

,) 30 Kjy; - 39 tajpw;Fs; ☐

<) 40 taJ kw;Wk; mjw;F Nky; ☐

10. vjw;fhf kf;fs; Gifapiy kw;Wk; ghf;F tiffis nky;Yfpwhh;fs;?

m) kfpo;r;rpf;fhf ☐

M) nrhpkhdk; MFtjw;fhf ☐

,) thapy; nfl;l ehw;wj;ijg; Nghf;Ftjw;fhf ☐

<) ey;y Ritf;fhf

11. Giff;Fk; Gifapiyia tpl nky;Yk; Gifapiyia vjw;fhf cgNahfg;gLj;JfpwPh;fs;?

m) nghJj; jz;lidapypUe;J jg;gpf;f ☐

M) Rygkhfg; gad;gLj;j ☐

,) Rygkhff; fpilg;gjhy; ☐

<) Gifapy;yhjjhy; ☐

12**.** vjw;fhf xUtd; nky;Yk; Gifapiyia Muk;gpf;fpwhd;?

m) Mh;tj;jpw;fhf ☐

M) Ritia czh;tjw;fhf ☐

,) ebfh;fis Nghy jhDk; nra;a ☐

<) el;ig cUthf;Ftjw;fhf ☐

13. xUtd;; Giff;Fk; NghJ NtW ve;j gof;f tof;fj;ij Nkw;nfhs;fpwPHfs;

m) fhiyapy; vOk;NghJ ☐

M) tpisahLk; NghJ ☐

,) J}f;fj;jpypUe;J vOk;NghJ ☐

<) nfhz;lhl;lq;fspd; NghJ ☐

tpisTfs;> jLg;G Kiwfs;> kw;Wk; Fzg;gLj;Jk; Kiwfs;:-

14. xUtd; Giff;Fk; NghJ me;jg; Gifia EfUk; mLj;jth;fSf;F vd;d ngah;?

m) Neubahfg; Gifj;jy; ☐

M) vjph;kiwahfg; Gifj;jy; ☐

,) rq;fpypg; Gif ☐

<) ePz;lfhyg; Gifj;jy; ☐

15. ePz;lfhyk; Gifj;jyhy; tpisAk; jPik vJ?

m) EiuaPuy; Gw;WNeha; ☐

M) tapw;Wg; Gw;WNeha; ☐

,) rpWePufk; gOjilg;G ☐

<) tapw;Wg; Nghf;F ☐

16. tha; Gw;WNehahy; Vw;gLk; mghafukhdmwpFwp vJ?

m) nts;is my;yJ rptg;G epwkhf ehf;fpy; gbjy; ☐

M) Nrhh;T ☐

,) ,UKjy; ☐

<) tpuy; kuj;Jg; Nghjy; (m) tpuypy; ☐

vhpr;ry; cz;lhFjy;

17. fh;g;gpzpg;ngz;fs; Gifapiyia Kfh;tjhy; Vw;glf;$ba mghak; vd;d?

m) mjpfkhd vilAld; Foe;ij gpwj;jy; ☐

M) fUf;fiyg;G ☐

,) fz; njhw;WNehAld; Foe;ij gpwj;jy; ☐

<) Rthrk; rk;ke;jg;gl;l NehAld; Foe;ij gpwj;jy; ☐

18. Gifg;gpbg;gjhy; clk;gpy; cs;s ve;j caph;rj;jpd; (itl;lkpd;) nray;ghL FiwfpwJ?

m) itl;lkpd; A ☐

M) itl;lkpd; C ☐

☐

,) itl;lkpd; E

<) itl;lkpd; D

19. Gifapiyg; ghf;nfl;by; cs;s Gifj;jiy jLf;Fk; Kj;jpiu vJ?

m. 

M. 

,. 

<. 

20. fPo;f;fz;ltw;wpy; vJ Gifapiyia epWj;Jtjw;F kpfr;rpwe;j Kiw?

m) nky;Yk; gof;fk; (gg;spfk;)

M) kd MNyhrid kw;Wk; kUe;Jfs;

,) topghL

<) jpahdk;

21. rpfnul; ghf;nfl;by; fhzg;gLk; thf;fpak; vJ?

m) Gifg;gof;fk; cly;eyj;ij ghjpf;fpwJ

M) Gifg;gJ cly;eyj;jpw;F NfL

,) Gifg;gJ cly;eyj;jpw;F jPq;F my;y

<) Gifg;gJ vg;NghjhtJ cly;eyj;ij ghjpf;fpwJ.

22. fPo;f;fz;ltw;wpy; Gifapiyia cgNahfpg;gjhy; Vw;gLk; tha; njhlHghf jPq;F vJ?

m) the;jp vLj;jy;

M) g+r;rpg;gy;

,) gw;fis fiw kw;Wk; nfl;l ehw;wk; ☐

<) <Wfspy; ,uj;j frpT ☐

23. Gifapy;yhj Gifapiyg; nghUl;fisg; gad;gLj;Jk; NghJ Vw;glf;$ba njhe;juT?

m) %l;L typ ☐

M) tha;Gw;WNeha; ☐

,) %is ghjpg;G ☐

<) nrhj;ijg;gy; ☐

24. cq;fs; gs;spapy; Gif kw;Wk; Gifrhh;e;j gof;ftof;fq;fisf; fl;Lg;gLj;j VNjDk; topKiwfs; gpd;gw;Wfpwhh;fsh?

m) Mk; ☐

M) ,y;iy ☐

,) njhpatpy;iy ☐

25. Gifapiyg; gof;fj;ijj; jLf;f ekJ muR vLj;Js;s eltbf;if vd;d?

m) nghJ ,lq;fspy; Gifg;gJ jil nra;ag;gl;Ls;sJ. ☐

M) ghf;F tpw;gid filfspy; jil nra;ag;gl;Ls;sJ. ☐

,) Gifgpbj;jy; rl;lg;gb Fw;wk;. ☐

gFjp III

fUj;Jf;fzpg;G

Kd;Diu

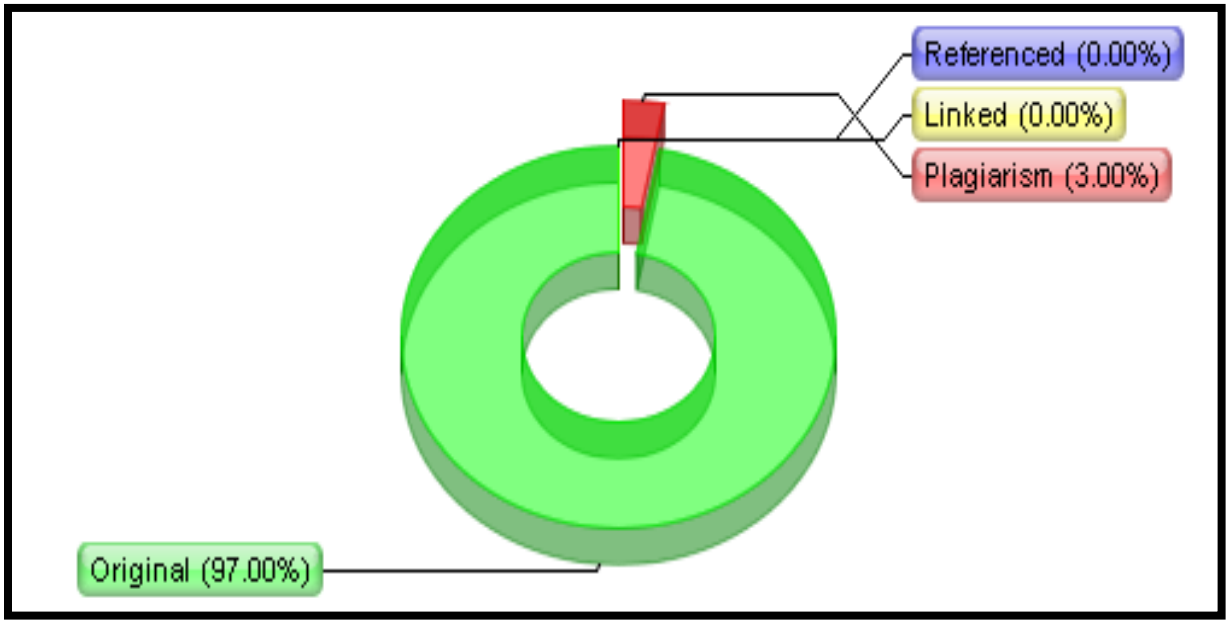
fPNo nfhLf;fg;gl;Ls;s thf;fpaq;fs; midj;Jk; Gifapiy kw;Wk; Gifapiy rhh;e;j nghUl;fshy; tpisaf;$ba jPq;Ffs;. mit thf;fpaq;fshf nfhLf;fg;gl;Ls;sd. jaT nra;J cq;fs; fUj;Jf;fis VjhtJ xd;wpy; Fwpf;fTk.;

t.vz;	Fwpg;Gfs;	xg;Gf; nfhs;fpNwd;	Rhpahfj; njhpatpy;iy	xg;Gf; nfhs;stpy;iy
1.	Gifj;jy; cly;eyj;jpw;F NfL			
2.	Gifapiy nky;Yk; gof;fk; Gifg;gpbg;gij tpl mt;tsT jPq;fhdJ my;y.			
3.	midj;J tpjkhd Gifapiyg; nghUl;fisAk; jtph;g;gJ ey;yJ.			
4.	Gifapiyg; nghUl;fisg; gad;gLj;Jtjhy; ez;gh;fs; kj;jpapy; vd;Dila kjpg;Gf; $Lk;.			
5.	Gifj;jy; vd;Dila tho;ehisf; Fiwf;fpwJ.			
6.	,uz;L %d;W Kiw Gifapiy nghUl;fis cgNahfpg;gjhy; cly;eyj;jpw;F ve;jj; jPq;Fk; ,y;iy.			
7.	Gifj;jy; xU kdpjdpd; ntspj;Njhw;wj;ijf; Fiwf;fpwJ.			
8.	xUKiw Gifj;jiy Muk;gpj;jhy; me;jg; gof;fj;ij epWj;JtJ kpfTk; fbdk;.			
9.	Gifapiyg; nghUl;fSf;F mbik MFjy; Giff;Fk; gof;fj;ij mjpfhpf;fpwJ.			

10.	Gifapiyg; nghUl;fSf;fhd thpia cah;j;Jtjhy; Gifg;gth;fspd; vz;zpf;if FiwAk;			
t.vz;	**Fwpg;Gfs;**	**xg;Gf; nfhs;fpNwd;**	**Rhpahfj; njhpatpy;iy**	**xg;Gf; nfhs;stpy;iy**
11.	ekJ mUfpy; ,Ug;gth;fs; Gifg;gjhy; ekf;F njhe;juT VJk; ,y;iy.			
12.	Gifapiy kw;Wk; ghf;F tiffis cz;gjhy; ekJ ftdk; $LfpwJ.			
13.	Giff;Fk; gof;fk; ek;ik r%f epfo;r;rpfspy; Rygkhf czu itf;fpwJ.			
14.	nghJ ,lq;fspy; Gifg;gth;fis jz;bf;f fLikahd rl;lk; ,aw;wg;glNtz;Lk;.			
15.	rpy ePz;l fhy Gifg;gth;fSf;F cly;ey njhe;juT VJk; ,y;iy.			
16.	Gifapiy gpbf;fhjth;fSk; EiuaPuy; Gw;WNehahy; ghjpf;fg;gLfpwhh;fs;			
17.	jhq;fs; nghpath;fs; vd;gij ep&gpf;f rpyh; Gifg;gpbf;fpwhh;fs;			
18.	rpyh; ngz;fisf; ftUtjw;fhf Gif gpbf;fpwhh;fs;.			
19.	,isQh;fs; epiwa ez;gh;fis miltjw;fhfg; Gifgpbf;fpwhh;fs;			
20.	ahuhtJ rpfnul; nfhLj;jhy; mij Ntz;lhk; vd;W nrhy;tJ kpfTk; fbdk;.			

APPENDIX-VIII

PLAGARISM REPORT USING PLAGARISM DETECTOR



Top 3 Plagiarized Sources:

Words#:	Source url:
65	http://www.actindia.org/Database/Tobacco...
34	http://en.wikipedia.org/wiki/Tobacco_adv...

17	http://www.jpmh.org/issues/200748406.pdf

Report:

3.00% of the content matched plagiarized sources and 97.00% of the content is original

J. J. College of Engineering and Technology

Tiruchirappalli-620 009

DEPARTMENT OF ENGLISH

Date: 21/01/2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that I have done the English editing on the research project of **Ms. A. Arockia Viji,** II M.Sc., Nursing, RVS College of Nursing, Sulur, Coimbatore entitled "***A study to assess the effectiveness of audio visual display regarding ill effects of tobacco products on the awareness and attitudes of adolescent boys towards using tobacco products in selected schools at Coimbatore***" I have found it as satisfactory and wish her success for the future ahead.

Yours sincerely,

Sign : 21/01/12

Name :

Prof. A. NOBEL JEBAKUMAR

HOD/ENGLISH

Seal : J.J. COLLEGE OF ENGINEERING & TECHNOLOGY TRICHY-9